

ANNUAL ENVIRONMENTAL REPORT 2011

GREYHOUND RECYCLING & RECOVERY

Crag Avenue Clondalkin Industrial Estate, Dublin 22

EPA Licence W0205-01

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1. INTRODUCTION

The following Annual Environmental Report was prepared in accordance with Condition 11.11 and Schedule E of the waste licence W0205-01, and with reference to Environmental Protection Agency guidance on Annual Environmental Reporting. This AER is detailing the activities carried out at the facility in the period from 1st September 2011 to 31st December 2011.

2. DESCRIPION OF THE SITE AND LICENSED ACTIVITIES

Greyhound Recycling and Recovery (GRR), Sustainable Resource Recovery Facility at Crag Avenue, Clondalkin Industrial Estate, Dublin 22, is surrounded in Industrial Estate by various warehouses and industrial buildings. The estate is bounded to the west by the M50 Motorway, to the south by the Grand Canal, to the east by Cloverhill Road and to the north by the Dublin-Kildare railway line and Cloverhill Industrial Estate, an industrial estate managed by the IDA.

Greyhound Recycling and Recovery Limited, at Crag Avenue site commenced its operation under the Waste Licence W0205-01 in September 2007. This licence allows to carry out following activities:

- Class 11, 12, and 13 Waste Disposal Activities, in accordance with the Third Schedule of the Waste Management Act, 1996.
- Class 2, 3, 4, 8, 11, 12 and 13 Waste Recovery Activities, in accordance with the Fourth Schedule of the Waste Management Act, 1996.

Greyhound Recycling & Recovery at Crag Avenue, accepts primarily non-hazardous commercial and industrial waste. In 2011 Crag Avenue facility has accepted 19,000 tonnes of residual fraction from household mixed recyclables separation at Dublin City Council, Material Recovery Facility W0238-01. This material was diverted into Solid Recovered Fuel for energy recovery.

Source Segregated Recyclables and Construction and Demolition were not accepted at the facility in 2011.

3. WASTE ACCEPTED 2011

Greyhound Recycling and Recovery Limited accepted the following waste streams during the reporting period:

- Commercial and Industrial waste comprising of source segregated metals and wood, mixed municipal waste and mixed packaging waste
- Mixed Dry Municipal household waste

4. WASTE QUANTITIES 2011

The Greyhound Recycling and Recovery at Crag Avenue is licensed to handle a maximum of 250,000 tonnes of waste per annum. The total quantity of material accepted and processed at the licensed facility during the reporting period was 190,000 tonne. The percentage of recycling and recovery achieved on wastes handled at the facility during the reporting period was 70%. A tabulated breakdown of the quantity and composition of wastes received, recovered, and disposed of, during the reporting period shows table 4.1.

The storage tonnage at the end of 2011 was higher of 870 tonnes than at the end of 2010.

4.1 Waste acceptance and dispatch

		Waste in	Waste out	Recovery	
EWC Code	Description of Waste	(tonnes)	(tonnes)	Disposal	%
02 07 04	Oat and wheat grains	154			
13 05 03	interceptor sludge		82	Disposal	0.04%
15 01 01	cardboard cores	114	114	Recovery	0.05%
15 01 03	wooden pallets	2,298	2,090	Recovery	0.97%
15 01 04	metal drums and cages	42			
15 01 05	Labels	49			
15 01 06	mixed dry recyclables	11,601	11,552	Recovery	5.35%
16 06 01	lead batteries	194	193	Recovery	0.09%
17 04 01	Copper pipes, copper cylinders & other	1,335	1,295	Recovery	0.60%
	copper scrap				
17 04 02	Aluminium frames, fascia, soffits and other	2,185	1,983	Recovery	0.92%
	aluminium scrap				
17 04 05	Iron & steel scrap from C&D	3,803	3,783	Recovery	1.75%
17 04 07	mixed non-hazardous, non-ferrous metals	1,649	2,085	Recovery	0.97%
19 12 08	shredded clothing	12			
19 12 10	Off spec SRF		305	Disposal	0.14%
19 12 10	Solid Recovered Fuel (SRF)	13,363	99,966	Recovery	58.40%
19 12 12	organic screenings		14,795	Disposal	6.85%
19 12 12	organic screenings	27	4,115	Recovery	1.91%
19 12 12	residuals from MDR processing	19,138	3,303		1.53%
19 12 12	heavy residuals from SRF processing		12,315	Disposal	5.70%
20 01 08	canteen waste,	222			
20 01 35*	mixed WEEE such as: white goods, TVs,	25	15	Recovery	0.01%
	monitors, PCs, fridges, other				
20 01 36	mixed WEEE		3	Recovery	0.00%
20 01 39	hard plastics: toys, pipes, crates, plates	110	43	Recovery	0.02%
20 01 40	source segregated metals	533	506	Recovery	0.23%
19 12 02	metals separated from MMW		1,186	Recovery	0.55%
20 03 01	MMW mainly from commercial and	140,255	30,042	Disposal	13.92%
	industrial sources				
	Total	197,109	189,771		
					100.00%

5. ENVIRONMENTAL MONITORING AND EMISSIONS DATA

Monitoring of emissions from the facility during the reporting period was carried out in accordance with Condition 8 and Schedule B and C of Greyhound Recycling and Recovery Ltd. waste licence W0205-01.

Dust deposition monitoring

The dust monitoring was carried out on two occasions at two locations in October 2011 and November 2011. The dust deposition did exceed the licensed limits in monitoring point D1 during October 2011. This exceedance was caused by birds droppings as explained in dust monitoring report. The results of the dust monitoring are shown in the below table.

Table 5.1

		D1	D2
Monitorin	g Period	ELV 350 mg/m ² /d	ELV 350 mg/m ² /d
From	То	mg/m²/d	mg/m²/d
28/09/2011	25/10/2011	693	68
25/10/2011	22/11/2011	230	125

Foul Sewer discharge monitoring

In accordance with Waste Licence W0205-01 the wastewater monitoring should be carried out monthly. Greyhound analysed trade effluent eleven times in 2011.

In March 2011 Greyhound submitted insufficient amount of sample for analysis and the laboratory couldn't carry out requested range of analysis.

All samples were taken from the Sewer Emission Monitoring point SE1.

The results of the analysis are shown in the table 5.2.

Surface Water discharge monitoring

In accordance with Waste Licence W0205-01 the surface water monitoring should be carried out quarterly. Greyhound analysed storm water 6 times in 2011. In addition the colour, smell and conductivity was examined on a daily basis by the Site Supervisor.

All samples were taken from the Storm Water Monitoring point SW1. The results of the analysis are shown in Table 5.3.

Table 5.2

Date sampled	BOD	COD	Suspende d Solids	Oil fats & greases	рН	Sulphates	Mineral oil	Phosphates	Detergent
ELV(mg/l)=>	2000	8000	2000	200	6-10	500	10	100	100
20/01/2011	100	150	49	<1	6.6	49	0.03	1	0.3
28/02/2011	145	700	373	42	7.1	203	1	1	23
31/03/2011	-	ı	-	-	ı	-	1	-	-
29/04/2011	10	25	14	<1	7.4	33	0.01	1	0.2
25/05/2011	120	757	233	7	12	97	0.08	14	0.4
23/06/2011	158	566	164	14	6.7	48	2.5	4.4	0.3
05/09/2011	26	121	74	<1	7.1	36	0.05	6	0.1
20/10/2011	280	927	116	15	6.5	72	0.02	23	0.06
09/11/2011	165	252	82	1	6.6	61	0.05	3	0.5
03/01/2012	2850	3445	488	34	6.3	224	0.01	0.8	0.1

Table 5.3

Date sampled	рН	COD	Suspended Solids	Oils, Fats and Greases
18/04/2011	7.3	81	21	<1
11/05/2011	7.3	101	30	<1
23/06/2011	7.3	13	8	<1
05/09/2011	6.2	152	14	<1
30/09/2011	7.1	65	33	<1
03/01/2012	7.2	73	55	<1

Noise Monitoring

In accordance with Waste Licence W0205-01 the noise monitoring should be carried out annually, during night and day activity. In 2011 noise monitoring was carried out on 20th and 21st October 2011 by Enviroglan in 5 monitoring points. Noise characteristics of the area are typical of an industrial estate zoned for light industrial activity. Additional noise sources emanated mainly from motor way M50 which is 100m away from Greyhound's boundary and also from nearby passing trains, and overhead aircraft and banging sounds associated with industrial activity. Existing road traffic was the dominant noise source for the majority of the time. The ambient noise in this industrial area is above the licence limitation of W205-01 which makes impossible to not to exceed the noise limits levels in any of the monitoring points. The results of the noise monitoring are shown in the below table.

Table 5.4

Monitoring location	Day /Night period	L _{Aeq}	L _{A90} dB(A)	L _{A10} dB(A)		
Noise Emission Limits Daytime dB(A) L (30 minutes) 55 dB(A) Night-time dB(A) L (30 minutes) 45 dB(A)						
NIA	Day	64.8	53.1	67.9		
N1	Night	54.1	47.5	54.9		
Na	Day	67.7	61.6	70.4		
N2	Night	59.7	51.2	62.7		
Na	Day	55.4	52.6	56.8		
N3	Night	52.8	49.6	54.3		
N4	Day	61.7	53	65.3		
	Night	56	48.5	59.1		
NE	Day	61.7	55.8	61.2		
N5	Night	56.2	47.8	58.4		

6. RESOURCE AND ENERGY CONSUMPTION

Since September 2011 all fixed machinery plant is powered by electricity. Only mobile plant use gas oil on site.

Data on resource, energy and primary raw material consumption for the reporting period is presented in Table 6.1 (below).

Table 6.1: Resource and Energy Usage in 2011.

Raw Material/Resource	Application	Consumption
Detergent	Vehicle and plant washing	800 litres
Deodorising liquid	Misting system	2900 litres
Electricity	Office and plant.	3945MWh
Mains water	Washing, Site cleaning, NAPS washing, misting system.	10319 cubic meters
Hydraulic Oil	Process plant and fleet vehicles.	12,000 litres
Engine Oil	Process plant and fleet vehicles.	2300 litres
Marked Diesel	Mobile plant machinery	339,000 litres

7. FACILITY DEVELOPMENT WORKS.

The developments undertaken in the reporting period is presented in Table 7.1(below).

Table 7.1 Development Works undertaken during the reporting period.

Project Objective	Works undertaken
Decrease of nuisance emission	 In-situ carbon regeneration of NAPS Re-installation of misting system on the North outside wall of SRF processing building Installation of new doors at the WBR2

8. ENVIRONMENTAL SYSTEMS & PROCEDURES

Greyhound Recycling and Recovery Ltd. facility at Crag Avenue hold ISO9001 and ISO14001 management system accreditations. All reviews, amendments, and implementations of quality and environmental procedures are undertaken within the framework of the ISO9001 and ISO14001 management systems. In 2011 Greyhound introduced plan of integration of both management systems including main structure principals of ISO18001.

The following new environmental related procedures were created:

CR-106 TFS Notification Procedure

CR-207 Interceptor Monitoring and Maintenance

CR-307 Cleaning Procedure for WRB2

CR-308 SRF Bale Loading Procedure

CR-309 Removal of Blockages from Shredders

AG-112 Training Procedure

9. ENVIRONMENTAL OBJECTIVES AND TARGETS FOR 2012

No.	Aspect(s)	Objective	Target	Due
		Ensure the most efficient and	Install additional equipment in the SRF Laboratory to carry out CV and Chloride analysis on a daily basis.	Project on hold
1	Waste Management	environmentally sustainable	Prepare project for SRF drying	Project on hold
		management of client waste streams.	Prepare project of SRF gasification	Project on hold
			Regenerate the activated carbon in the existing Negative Air Pressure System (NAPS)	April 2012
			Design and Installation of NAPS phase 1 Upgrade	September 2012
	Air	Reduce odour emissions from waste handling and processing activities	Expand the monitoring parameters of upgraded NAPS.	September 2012
2			Replace doors 7, 11, 12	April 2012
			External odour monitoring spot check programmme	Ongoing
			Installation of additional external odour control misting units	May 2012
			Feasibility Project to spray incoming and outgoing trucks to reduce odour	August 2012
			Installation of composite sampler at SE1	September 2012
		Prevent surface water contamination, decrease emission values to storm water and sewer	Retrain all operatives on Spillage Response and Bunds usage	ongoing
3	Water / Oil		Review of storm water system at the facility. Carry out CCTV survey of all surface water lines. Prepare Storm Water prevention plan	May 2012
			Prepare plan for quality control of surface water discharge from Yard 2 North.	May 2012

			Bunds repair programme	July 2012
			Bunds integrity retesting	August 2012
			Upgrade water treatment unit at the truck wash bay.	May 2012
		Achieve organized, efficient and safe movement of cars, trucks and	Repair existing traffic control units. New traffic management plan for the site	October 2012
4	Traffic	machinery on site minimising noise	Repair concrete area in Yard 2 North	April 2012
		and emissions	Identify areas for further concrete improvement works	Ongoing
5	Infrastructure &	Environmentally efficient and Safety	Installation of cover over the Diesel Bund	November 2012
J ∟	Systems	management of waste operation	Installation of Audible and Visual Door alarms	April 2012
6	Resource use and Energy Efficiency	Identify opportunities for energy use reduction and efficiency. Identify opportunities for reduction in the quantity of water used on site	Review the Project plan for Water Conservation from 2011	June 2012
			Integrate Environmental and Quality Management Systems	January 2012
	Integrated Management System	Management control of compliances with the	Review of all used forms and create new where necessary	April 2012
			Carry out all scheduled audits, reviews, meetings, updates and trainings as Management System requirements	ongoing
7			Creation new environmental procedures: SRF Bale loading procedure Cleaning procedure for WBR2 SRF shredder cleaning procedure	March 2012
			Circulation and training of reviewed/new procedures	May 2012
			Update Legislation Register and Environmental Aspects and impacts. Complete new company policies.	January 2012

10. INCIDENTS

There were four non odour related environmental incident on site in 2011. The incidents were related to doors breakdown, unapproved storage and smoke at the facility.

11. COMPLAINTS

Facility has received 68 of complaints during the reporting period.

57 of them were made directly to Greyhound Recycling and Recovery and 11 via EPA.

All 68 complaints received during the reporting period were related to odour. All complaints were recorded and followed with the appropriate measurements.

12. ODOUR MANAGEMENT PROGRAMME

The odour management programme for licensed facility was submitted to the Agency on 25th September 2009. In 2011 the following works were done to improve the Negative Air Pressure System (NAPS) operation:

- In August the NAPS Procedure was revised and amended in accordance with laboratory analysis and tests results on GRR carbon chemical regeneration.
- In August-September GRR carried out full washing and regeneration of the carbon.
 For this purpose was used around 100-150 cu meters of water, 7000 litters of caustic soda and 2000 litters of Methanol
- IPEC prepared general programme for upgrading of existing system as well as additional parallel unit for better air treatment including stack discharge
- Odour Monitoring Ireland prepared Odour Impact assessment for the project of upgrading NAPS

13. REVIEW OF NUISANCE CONTROLS.

Pest contractor, Pest Guard carried out 9 visits to control vermin, during which rebate rat poison in the boxes, replaced broken boxes or installed additional where required.

Other pest control contractor Rentokil visited Greyhound facility 36 times to spray the sheds on flies.

14. VOLUME OF TRADE EFFLUENT/LEACHATE AND OR CONTAMINATED STORM WATER PRODUCED AND VOLUME TRANSPORTED OFF-SITE

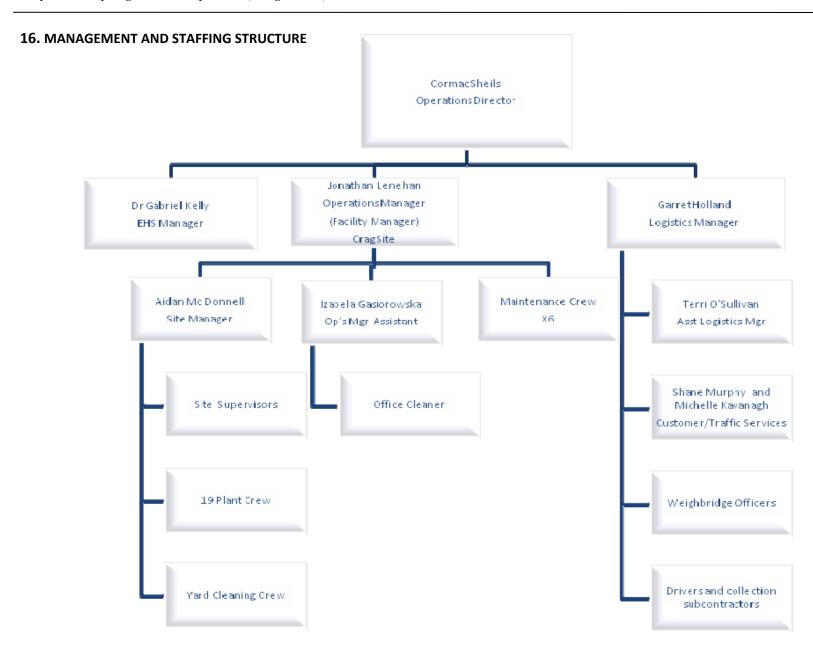
The following amount of effluent was sent off site during the 2011 reporting period:

- 79 tonnes of interceptor sludge to Rilta Environmental
- 3 tonnes of interceptor sludge to Enva Ireland Ltd.

15. FINANCIAL PROVISION

Greyhound Recycling and Recovery Ltd. public and product liability indemnity limit is up to €6,500,000. In terms of environmental pollution the indemnity applies to damage to any buildings or other structures or of water or land or atmosphere caused by pollution or contamination. The policy covers pollution caused by a sudden, identifiable, unintended and unexpected event and not gradual pollution. This cover will be in excess of any environmental liability that may arise due to such incident.

All trans-frontier shipment of non-green list material undertaken by Greyhound Recycling and Recovery is effected under a financial guarantee calculated on the cost for return and disposal of material where warranted.



17. PROGRAMME FOR PUBLIC INFORMATION

Greyhound Recycling and Recovery Limited maintains a *Public Information File* at the licensed facility. This file contains specified information relating the environmental performance of the Company. The file is available for inspection by the public on request at the facility. No public requests for information were received during the reporting period.

18. RESIDUALS MANAGEMENT PLAN

The recent Residual Management Plan was submitted to the Agency in October 2010

19. ENVIRONMENTAL LIABILITY RISK ASSESSMENT

The Environmental Liability Risk Assessment was submitted with AER for 2009. There were no major changes in the environmental liabilities in 2011.

Appendix 1

PRTR REPORT 2011



Guidance to completing the PRTR workbook

AER Returns Workbook

REFERENCE YEAR 2011

1. FACILITY IDENTIFICATION

1.1 AGIETT I DENTILIOATION	
Parent Company Name	Greyhound Recycling and Recovery
Facility Name	Greyhound Recycling & Recovery
PRTR Identification Number	W0205
Licence Number	W0205-01

Waste or IPPC Classes of Activity	
No. class_name	
4.4 Recycling or reclar	nation of other inorganic materials.
	e prior to submission to any activity referred to in
3.11 a preceding paragram	aph of this Schedule.
Repackaging prior	to submission to any activity referred to in a
3.12 preceding paragra	oh of this Schedule.
Storage prior to su	bmission to any activity referred to in a preceding
paragraph of this S	Schedule, other than temporary storage, pending
3.13 collection, on the p	remises where the waste concerned is produced.
Use of waste obtain	ned from any activity referred to in a preceding
4.11 paragraph of this S	Schedule.
Exchange of waste	for submission to any activity referred to in a
4.12 preceding paragra	
Storage of waste in	ntended for submission to any activity referred to
	agraph of this Schedule, other than temporary
storage, pending c	ollection, on the premises where such waste is
4.13 produced.	•
Recycling or reclar	nation of organic substances which are not used
	ing composting and other biological
4.2 transformation pro-	cesses).
4.3 Recycling or reclar	nation of metals and metal compounds.
4.8 Oil re-refining or ot	her re-uses of oil.
Address 1 Crag Avenue	
Address 2 Clondalkin Industri	al Estate
Address 3 Clondalkin	
Address 4 Dublin 22	
Dublin	
Country Ireland	
Coordinates of Location -6.38899 53.3323	
River Basin District IEEA	
NACE Code 3832 Main Economic Activity Recovery of sorted	I motoriale
AER Returns Contact Name Dr Gabriel Kelly	materials
AER Returns Contact Name of Gabriel Kelly@grey	houndroovoling com
AER Returns Contact Position EHS Manager	noundrecycling.com
AER Returns Contact Fosition E16 Wallager AER Returns Contact Telephone Number 01 457 7777	
AER Returns Contact Mobile Phone Number 0876165574	
AER Returns Contact Fax Number 01 4196882	
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	0
User Feedback/Comments	
User Feedback/Comments	the control of the co

2. PRTR CLASS ACTIVITIES

Z. PKTK CLASS ACTIVITIES	
Activity Number	Activity Name
50.1	General
5(c)	Installations for the disposal of non-hazardous waste
50.1	General

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

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

SECTION A: SECTOR SPECIFIC PRTR POLLUTANTS

SECTION A . SECTOR SPECIFIC PRIN FOL	LUTANTO	Data on am	bient monitoring of	Storm/surface water or groundwar	ter, conducted as part or your nice	nce requirements, snould i	NOT be submitted under AER /	PRIN Reporting as this of
	RELEASES TO WATERS				Please enter all quantities	in this section in KG:	s	
	POLLUTANT						QUANTITY	
				Method Used				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

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

SECTION B : REMAINING PRTR POLLUTANTS

	RELEASES TO WATERS				Please enter all quantities	in this section in KG	is	
	POLLUTANT						QUANTITY	
			1	Method Used				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0,0	0,0	0,0	0,0

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

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

		RELEASES TO WATERS				Please enter all quantitie	s in this section in KG	S	
		POLLUTANT						QUANTITY	
					Method Used				
	Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					total water discharged to				
					surface water in 2011 =				
1	306	COD	Е	ESTIMATE	17873cu.m.(estimated)	1444	,0 1444,0	0,0	0,0
2	240	Suspended Solids	Е	ESTIMATE		480	,0 480,0	0,0	0,0
1	14	Fats, Oils and Greases	Е	ESTIMATE		18	,0 18,0	0,0	0,0

4.3 RELEASES TO WASTEWATER OR SEWER

Link to previous years emissions data

PRTR#: W0205 | Facility Name: Greyhound Recycling & Recovery | Filename: PRTR of W0205_2 2012-05-04 12:22

SECTION A : PRTR POLLUTANTS

SECTION A . FRIR FULLUTANTS								
	OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREAT	MENT OR	SEWER		Please enter all quantitie	s in this section in K	Gs	
	POLLUTANT		M	ETHOD			QUANTITY	
				Method Used				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0	0	0.0	0.0

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

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

SECTION B. REMAINING P	OLLOTANT EMISSIONS (as required in your Licence)							
	OFFSITE TRANSFER OF POLLUTANTS DESTINED FO	R WASTE-WATER TREATMENT OR	SEWER		Please enter all quantities	in this section in KGs		
	POLLUTANT		1	METHOD			QUANTITY	
				Method Used				
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
				total water discharged into				
				sewer in 2011 = 16276				
				cu.m.	0,0	0,0	0,0	0,0
303	BOD	E E	ESTIMATE		7201,0	7201,0	0,0	0,0
306	COD	E	ESTIMATE		12847,0	12847,0	0,0	0,0
240	Suspended Solids	E	ESTIMATE		2936,0	2936,0	0,0	0,0
314	Fats, Oils and Greases	E E	ESTIMATE		218,0	218,0	0,0	0,0
343	Sulphate	E	ESTIMATE		1507,0	1507,0	0,0	0,0
324	Mineral oils	E	ESTIMATE		12,0	12,0	0,0	0,0
387	Ortho-phosphate (as P)	E	ESTIMATE		103,0	103,0	0,0	0,0
308	Detergents (as MBAS)	E	ESTIMATE		41,0	41,0	0,0	0,0

			Please enter	all quantities on this sheet in Tonnes								0
									Haz Waste : Name and			
									Licence/Permit No of Next Destination Facility Non	Haz Waste : Address of Next	Name and License / Permit No. and	
			Quantity						Haz Waste: Name and	Destination Facility	Address of Final Recoverer /	Actual Address of Final Destination
			(Tonnes per Year)				Method Used		Licence/Permit No of Recover/Disposer	Non Haz Waste: Address of Recover/Disposer	Disposer (HAZARDOUS WASTE ONLY)	i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
			rear)		Waste		Wethou Osed		Recoverbisposer	Recover/Disposer	ONET)	(HAZAKDOUS WASTE ONET)
	European Waste				Treatment			Location of				
Transfer Destination	Code	Hazardous		Description of Waste	Operation	M/C/E	Method Used	Treatment				
										Killaskillen Kinnegad		
										Mullingar Co. Westmeath		
Middie de Comme	40.40.40	NI-	40005.0	a combunatible waste (refuse derived fuel)	D4		Marabad .	Official in Incland	Lagan Camant D0497 05	,Kinnegad ,Mullingar Co. Westmeath ,,IRELAND		
Within the Country	19 12 10	No	16665,0	combustible waste (refuse derived fuel)	R1	M	Weighed	Offsite in Ireland	Lagan Cement ,P0487-05 CMP-Cimentos Maceira e	Westifieatif ,,IRELAND		
									Pataias S.A.Fábrica de	2405-019 ,,Maceira-Liz		
To Other Countries	19 12 10	No	8842,0	combustible waste (refuse derived fuel)	R1	M	Weighed	Abroad	Maceira-Liz ,	Leiria ,,Portugal		
							· ·			Fabrica Outao Apartado 71		
										2901-864		
To Other Countries	19 12 10	No	5894,0	combustible waste (refuse derived fuel)	R1	M	Weighed	Abroad	Cal e Ciment SA ,.	,,,Setubal,,,Portugal		
Mithin the Country	19 12 10	No	47200.0) combustible waste (refuse derived fuel)	R13	С	Volume Calculation	Officia in Iroland		Alexandra Road Dublin1		
Within the Country	19 12 10	NO	47200,0	Combustible waste (refuse derived fuer)	KIS	C	volume Calculation	Offsite in freiand	DC-10-0019-01	,.,.,.,е.а.і.		
									Irish Cement Limited ,P0030-	Platin Works Platin ,County		
Within the Country	19 12 10	No	17018,0	combustible waste (refuse derived fuel)	R1	M	Weighed	Offsite in Ireland		Meath ,Louth. ,.,Ireland		
				other wastes (including mixtures of								
				materials) from mechanical treatment of								
Mithin the Country	10 10 10	No	407,0	wastes other than those mentioned in 19 12	D1	М	Majahad	Officia in Iroland	Rampere Landfill , W0066-	Co. Wicklow ,,,,,,Ireland		
Within the Country	19 12 12	No	407,0	other wastes (including mixtures of	וט	IVI	Weighed	Offsite in Ireland	02	Co. Wicklow ,.,.,lieland		
				materials) from mechanical treatment of								
				wastes other than those mentioned in 19 12					Greenstar Holdings Ltd.	Ballynagran Residual Landfill		
Within the Country	19 12 12	No	11629,0) 11	D1	M	Weighed	Offsite in Ireland	,W0165-02	,., Co. Wicklow ,., Ireland		
				other wastes (including mixtures of								
				materials) from mechanical treatment of					0	Kanada Kantatawa		
Within the Country	19 12 12	No	377.0	wastes other than those mentioned in 19 12	D1	М	Weighed	Offsite in Ireland	Greenstar Holdings Ltd W0146-02	Knockharley KentstownNavan Co. Meath,Ireland		
Within the Country	13 12 12	140	377,0	other wastes (including mixtures of	Di	IVI	Weighted	Offsite III freiand	,**************************************	,,,,vavarr oo. wcaar,,,rciaria		
				materials) from mechanical treatment of						Larch Hill House		
				wastes other than those mentioned in 19 12					Cleary Compost & Shredding	,,,Monasterevin Co. Kildare		
Within the Country	19 12 12	No	934,0		R3	M	Weighed	Offsite in Ireland	Ltd. ,COR-KE-08-0010-01	,,,Ireland		
				other wastes (including mixtures of								
				materials) from mechanical treatment of wastes other than those mentioned in 19 12						Carranstown Duleek		
Within the Country	19 12 12	No	2382,0		D1	М	Weighed	Offsite in Ireland	Indaver Ireland ,W0167-02	Co.Meath ,,,Ireland		
				other wastes (including mixtures of			3					
				materials) from mechanical treatment of								
Andrew the Co.	40.40.40	Ma	0.107	wastes other than those mentioned in 19 12	DO		Marie en el	0#-it- in 1	Enrich Composting Facility	.,,,Kilcock Co. Meath		
Within the Country	19 12 12	No	3181,0	7.11	R3	M	Weighed	Offsite in Ireland	,WFP/MH/08/0001/01 John Cullen t/a Multi Metal	,.,Ireland Bollarney The Murrough,.,		
									Recycling LtdWFP-WW-09-			
Within the Country	20 01 40	No	506.0) metals	R4	M	Weighed	Offsite in Ireland		Ireland		
, , , , , , , , , , , , , , , , , , , ,							3			Bollarney The Murrough,.,		
									Recycling Ltd. ,WFP-WW-09-			
Within the Country	19 12 02	No	643,0) ferrous metal	R4	M	Weighed	Offsite in Ireland		,,,Ireland		
Within the Country	19 12 02	No	5/2 0) ferrous metal	R4	M	Weighed	Offsite in Ireland		23 Mitchell St ,,,Clonmel Co. Tipperary ,,,Ireland		
within the Country	13 12 02	140	543,0	renous metal	114	IVI	vveigneu	Onsite in heland		23 Mitchell St ,,,Clonmel		
Within the Country	15 01 03	No	1858,0) wooden packaging	R3	M	Weighed	Offsite in Ireland		Co. Tipperary ,,,Ireland		
· ·							_			Office 2 ,.,Roxboro Co.		
Within the Country	15 01 03	No	14,0	wooden packaging	R3	M	Weighed	Offsite in Ireland		Roscommon ,.,Ireland		
									Nurendale Limited T/A Panda Waste	Rathdrinagh Beauparc		
Within the Country	15 01 03	No	218.0) wooden packaging	R3	М	Weighed	Offsite in Ireland	Services.,W0140-02	"Navan Meath. "Ireland		
Wildlin the Country	10 01 00	140	210,0	Hooden packaging	110	141	Weighted	Challe in helaliu	00141003.,440140-02	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		

Within the Country	13 05 03	Yes	3,0 interceptor sludges	D1	М	Weighed	Offsite in Ireland	ENVA Ireland Ltd ,WO184- 01	Clonminam Industrial Estate ,,,Portlaoise Co Laois ,,,Ireland	ENVA Ireland Ltd ,WO184- 01,Clonminam Industrial Estate Portlaoise Co Laois ,,,Portlaoise Co Laois ,,,Ireland	Clonminam Industrial Estate Portlaoise Co Laois ,,Portlaoise Co Laois ,,Ireland
								0	Unit 402 Grant's Drive Greenogue Business Park .		Greenogue Business Park .
Within the Country	13 05 03	Yes	79,0 interceptor sludges	D1	М	Weighed	Offsite in Ireland	RILTA Environmental ,W0192-01.	"Rathcoole Co. Dublin "Ireland Rathdown Cl Lissue Ind Est "Lisburn ,BT28 2RB,United	Park . ,,,Rathcoole Co. Dublin ,,,Ireland	",Rathcoole Co. Dublin ",Ireland
To Other Countries	15 01 01	No	114,0 paper and cardboard packaging	R3	М	Weighed	Abroad	Paperman Products ,.	Kingdom Address. 29 Herrons Road		
To Other Countries	20 01 39	No	30,0 plastics	R3	М	Weighed	Abroad	Plaswire Limited. ,.	Castlewellan. Co Down. ,BT31 9SR.,United Kingdom		
To Other Countries	20 01 39	No	13,0 plastics	R3	М	Weighed	Abroad	WRC Recycling .SWE/019265	Anchans Farm Johnstone Renfrewshire ,,,Renfrewshire ,PA67 EE ,United Kingdom		
	15 01 06	No	4444,0 mixed packaging	R3	М	Weighed	Offsite in Ireland	Killarney Waste Disposal ,W0217-01 Clean (Irl) Refuse and	Aughacureen ,., Killarney Co. Kerry ,.,Ireland Smithstown Ind. Est.		
Within the Country	15 01 06	No	1662,0 mixed packaging	R3	М	Weighed	Offsite in Ireland	RecyclingCo. Ltd. , 002/07/WPT/CL	"Shannon Co. Clare, "Ireland		
Within the Country	15 01 06	No	525,0 mixed packaging	R3	М	Weighed	Offsite in Ireland	WERS ,.	Tuam Business Park ,,,Tuam Co Galway,,,Ireland Old Radiator Factory ,,,Murrough Co. Wicklow		
Within the Country	15 01 06	No	10,0 mixed packaging other wastes (including mixtures of	R3	М	Weighed	Offsite in Ireland	Cgreen Recycling ,.	,.,Ireland		
Within the Country	19 12 12	No	materials) from mechanical treatment of wastes other than those mentioned in 19 12 20,0 11 other wastes (including mixtures of materials) from mechanical treatment of	R3	М	Weighed	Offsite in Ireland	Clean (Irl) Refuse and RecyclingCo. Ltd. , 002/07/WPT/CL	Smithstown Ind. Est. ,,,Shannon Co. Clare,,,Ireland		
Within the Country	19 12 12	No	wastes other than those mentioned in 19 12 421,0 11 other wastes (including mixtures of materials) from mechanical treatment of	R3	М	Weighed	Offsite in Ireland	Dillon Waste ,W0184-01	The Kerries ,,,Tralee Co. Kerry ,,,Ireland		
Within the Country	19 12 12	No	wastes other than those mentioned in 19 12 2862,0 11	R3	М	Weighed	Offsite in Ireland	Killarney Waste Disposal ,W0217-01 Hammond Lane Metal Co.	Aughacureen ,., Killarney Co. Kerry ,.,Ireland Pigeon Hse rd Ringsend		
Within the Country	17 04 01	No	1295,0 copper, bronze, brass	R4	E	Weighed	Offsite in Ireland	,WFP-DC-09-0013-01 Hammond Lane Metal Co.	,,,Dublin 4 ,,,Ireland Pigeon Hse rd Ringsend		
Within the Country	17 04 02	No	1983,0 aluminium	R4	E	Weighed	Offsite in Ireland	,WFP-DC-09-0013-01 Hammond Lane Metal Co.	,,,Dublin 4 ,,,Ireland Pigeon Hse rd Ringsend		
Ť	17 04 05	No	3783,0 iron and steel	R4	E	Weighed		,WFP-DC-09-0013-01 Hammond Lane Metal Co.	,,,Dublin 4 ,,,Ireland Pigeon Hse rd Ringsend		
Within the Country	17 04 07	No	2085,0 mixed metals	K4	_	Weighed	Offsite in freiand	,WFP-DC-09-0013-01	,.,Dublin 4 ,.,Ireland	Hammond Lane Metal Co. ,WFP-DC-09-0013-	
Within the Country	16 06 01	Yes	193,0 lead batteries	R13	Е	Weighed	Offsite in Ireland	Hammond Lane Metal Co. ,WFP-DC-09-0013-01	Pigeon Hse rd Ringsend ,,,Dublin 4 ,,,Ireland	"Dublin 4 Dublin 4 Ireland Rehab Recycle WFP-DS	Pigeon Hse rd Ringsend ,,,Dublin 4 ,Dublin 4 ,Ireland 77 Broomhill Road ,
Within the Country	20 01 23	Yes	discarded equipment containing 0,6 chlorofluorocarbons	R13	Е	Weighed	Offsite in Ireland		77 Broomhill Road Thallaght ,.,Dublin 22. ,.,Ireland	Road , Thallaght ,Dublin 22. ,Dublin 22. ,Ireland Rehab Recycle ,WFP-DS	Thallaght ,Dublin 22. ,Dublin 22. ,Ireland
Within the Country	16 02 13	Yes	discarded equipment containing hazardous components (16) other than those 15,0 mentioned in 16 02 09 to 16 02 12	R5	E	Weighed	Offsite in Ireland		77 Broomhill Road Thallaght ,.,Dublin 22. ,.,Ireland	10-0008-01,77 Broomhill Road , Thallaght ,Dublin 22. ,Dublin 22. ,Ireland	77 Broomhill Road , Thallaght ,Dublin 22. ,Dublin 22. ,Ireland
Within the Country	16 02 14	No	discarded equipment other than those 2,5 mentioned in 16 02 09 to 16 02 13	R5	E	Weighed	Offsite in Ireland		77 Broomhill Road Thallaght ,.,Dublin 22. ,.,Ireland		

materials from mechanical treatment of wastes other than those mentioned in 19 12 12 No 653,0 11 1											
nin the Country 19 12 12 No 653,0 11 D1 C Weighed Offsite in Ireland KTK Landfill ,W0081-03 Co. Kildare _,Ireland Brownsown , , Kilcullen Country 20 03 01 No 1467,0 mixed municipal waste on materials) from mechanical treatment of wastes (including mixtures of materials) from mechanical treatment of wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 No 20711,0 mixed municipal waste of materials) from mechanical treatment of wastes other than those mentioned in 19 12 No 464,0 11 D1 C Weighed Offsite in Ireland Winters of materials) from mechanical treatment of wastes other than those mentioned in 19 12 No 143,0 mixed municipal waste other than those mentioned in 19 12 No 143,0 mixed municipal waste other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 No 143,0 mixed municipal waste other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 No 143,0 mixed municipal waste other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 No 144,0 11 No 144,0 mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 No 144,0 11											Provinctours Kileulles
in the Country 20 3 01 No 1467,0 mixed municipal waste ofter wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 12 No 20 3 01 No 20 11,0 mixed municipal waste ofter than those mentioned in 19 12 12 No 20 3 01 No 20 11,0 mixed municipal waste ofter than those mentioned in 19 12 12 No 20 3 01 No 20 11,0 mixed municipal waste ofter than those mentioned in 19 12 12 No 20 3 01 No 20 11,0 mixed municipal waste ofter than those mentioned in 19 12 No 20 3 01 No 20 11,0 mixed municipal waste ofter than those mentioned in 19 12 No 20 3 01 No 20 11,0 mixed municipal waste ofter than those mentioned in 19 12 No 20 3 01 No 20 11,0 mixed municipal waste ofter than those mentioned in 19 12 No 20 3 01 No 20 11,0 mixed municipal waste ofter than those mentioned in 19 12 No 20 3 01 No 20 11,0 mixed municipal waste ofter than those mentioned in 19 12 No 20 3 01 No 20 3 01 No 20 11,0 mixed municipal waste ofter than those mentioned in 19 12 No 20 3 01 No 2	,	Vithin the Country	19 12 12	No		D1	С	Weighed	Offsite in Ireland		
other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 in the Country 19 12 12 No 321 No 3218,0 11 No 3218,0 mixed municipal waste other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 No 3218,0 11 No 3218,0 mixed municipal waste other than those mentioned in 19 12 No 3218,0 11 No 3218,0 mixed municipal waste other than those mentioned in 19 12 No 3218,0 mixed municipal waste other than those mentioned in 19 12 No 3218,0 mixed municipal waste other wastes (including mixtures of materials) from mechanical treatment of wastes (including mixtures of materials) from mechanical treatment of wastes (including mixtures of materials) from mechanical treatment of wastes (including mixtures of materials) from mechanical treatment of wastes (including mixtures of materials) from mechanical treatment of wastes (including mixtures of materials) from mechanical treatment of wastes (including mixtures of materials) from mechanical treatment of wastes (including mixtures of materials) from mechanical treatment of wastes (including mixtures of materials) from mechanical treatment of wastes (including mixtures of materials) from mechanical treatment of wastes (including mixtures of materials) from mechanical treatment of wastes (including mixtures of materials) from mechanical treatment of wastes (including mixtures of materials) from mechanical treatment of wastes (including mixtures of materials) from mechanical treatment of wastes (including mixtures of materials) from mechanical treatment of wastes (including mixtures of materials)		,					-				
hin the Country 19 12 12 No 9218,0 11 D1 C Weighed Offsite in Ireland Landfill W0201-02 GROR ha Mona Drehid Landfill W0201-02 (will are in Ireland SoRD ha Mona Drehid Landfill W0201-02 (will are in Ireland SorD ha Mona Drehid Landfill W0201-02 (will are in Ireland SorD ha Mona Drehid Landfill W0201-02 (will are in Ireland Landfi	١	Vithin the Country	20 03 01	No	other wastes (including mixtures of materials) from mechanical treatment of	D1	С	Weighed	Offsite in Ireland		Co.Kildare ,,, reland
ini the Country 20 03 01 No 20711,0 mixed municipal waste other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 nin the Country 19 12 12 No 464,0 11 C Weighed Offsite in Ireland (Wighed Offsite in Ir	,	Vithin the Country	10 10 10	No		D4	0	Majahad	Officia in Iroland		Vildoro Iroland
other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 D1 C Weighed Offsite in Ireland (W0165-02, Co. Wicklow ,Ireland, Co. Wicklow ,Ireland, W0165-02, Co. Wicklow ,Ireland, Co. Wicklow ,Ireland, W0165-02, W0165-02		vitriin the Country	19 12 12	INO	9216,0 11	וט	C	vveigned	Offsite in freiand		.,.,Nidare ,.,Ireland
nin the Country 19 12 12 No 464,0 11 D1 C Weighed Offsite in Ireland W0165-02, Co. Wicklow ,, reland September Sep		Vithin the Country	20 03 01	No	other wastes (including mixtures of materials) from mechanical treatment of	D1	С	Weighed	Offsite in Ireland	,	
Inin the Country 20 03 01 No 1043,0 mixed municipal waste other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 no 1											
nin the Country 20 03 01 No 1043,0 mixed municipal waste other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 No 774,0 11 D1 C Weighed Offsite in Ireland Rampere Landfill ,W0066-02,Co. Wicklow ,,Ireland Carranstown ,, Duleek National (Indaver Ireland Wolfs-02,Co. Wicklow ,,Ireland Rampere Landfill ,W0066-02,Co. Wicklow ,,Ireland Carranstown ,, Duleek Co.,Meath ,,Ireland Carranstown ,, Duleek Co.,Meath ,,Ireland Carranstown ,, Duleek Co.,Meath ,,Ireland Laois County Wolfs-02 Laois County Council Kyletalesha Landfill ,W0028,Kyletalesha Landfill Laois.		Vithin the Country	19 12 12	No	464,0 11	D1	С	Weighed	Offsite in Ireland	,W0165-02	,., Co. Wicklow ,.,Ireland
nin the Country 20 03 01 No 1739,0 mixed municipal waste other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 12 No 1206,0 11 D1 C Weighed Offsite in Ireland Indaver Ireland W0167-02 Co. Weighed Carranstown , , Duleek Carranstown ,	,	Vithin the Country	20 03 01	No	other wastes (including mixtures of materials) from mechanical treatment of	D1	С	Weighed	Offsite in Ireland		
other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 ini the Country 19 12 12 No 1206,0 11 D1 C Weighed Offsite in Ireland Indaver Ireland, W0167-02 Carranstown,,, Duleek Carranstow	,	Vithin the Country	19 12 12	No	774,0 11	D1	С	Weighed	Offsite in Ireland	Rampere Landfill ,W0066-02	.,.,Co. Wicklow ,.,Ireland
nin the Country 19 12 12 No 1206,0 11 D1 C Weighed Offsite in Ireland Indaver Ireland ,W0167-02 Co.Meath ,,, Ireland Carranstown ,, Duleek nin the Country 20 03 01 No 2710,0 mixed municipal waste D1 C Weighed Offsite in Ireland Indaver Ireland ,W0167-02 Co.Meath ,, Ireland Laois Country Council Kyletalesha Landfill ,W0028- ,,,Kyletalesha Landfill Laois.	,	Vithin the Country	20 03 01	No	other wastes (including mixtures of materials) from mechanical treatment of	D1	С	Weighed	Offsite in Ireland		
Carranstown, Duleek nin the Country 20 03 01 No 2710,0 mixed municipal waste D1 C Weighed Offsite in Ireland Indaver Ireland ,W0167-02 Co.Meath ,,Ireland Laois County Council Kyletalesha Landfill ,W0028,Kyletalesha Landfill Laois.		Vista in the Original	40.40.40	Ma		D4	0	Material	Office in Indianal		
Laois County Council Kyletalesha Landfill ,W0028,,,Kyletalesha Landfill Laois.		vitnin the Country	19 12 12	No	1206,0 11	וט	C	vveignea	Offsite in Ireland	indaver freiand ,vv0167-02	
	1	Vithin the Country	20 03 01	No	2710,0 mixed municipal waste	D1	С	Weighed	Offsite in Ireland	Laois County Council	,,
nin the Country 20 03 01 No 2372,0 mixed municipal waste D1 M Weighed Offsite in Ireland 02 ,,, reland	ı,										
		Vithin the Country	20 03 01	No	2372,0 mixed municipal waste	D1	M	Weighed	Offsite in Ireland	02	,.,Ireland

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

Link to previous years waste data
Link to previous years waste summary data & percentage change