

Fax. [0 2 1] 4 3 2 1 5 2 2

ANNUAL ENVIRONMENTAL REPORT GREENSTAR ENVIRONMENTAL SERVICES LIMITED MATERIALS RECOVERY FACILITY BALLYMOUNT LICENCE NO. W0039-02

JANUARY 2010 - DECEMBER 2010

Prepared For: -

Greenstar Environmental Services Ltd.,
Unit 6,
Ballyogan Business Park,
Ballyogan Road,
Sandyford,
Dublin 18.

Prepared By: -

O' Callaghan Moran & Associates, Granary House, Rutland Street, Cork.

31st March 2011

Project	Annual Environmental Report 2010							
Client	nt Greenstar Environmental Services Ltd. W0039-02							
Report No	Date	Status	Prepared By	Reviewed By				
0480401	30/03/2010	Draft	Martina Gleeson PhD	Michael Watson MA.				
0480401	31/03/2010	Final	Martina Gleeson PhD	Michael Watson MA.				

TABLE OF CONTENTS

PAGE

1.	INT	RODUCTION	1
2.	SIT	E DESCRIPTION	2
	2.1 2.2 2.2.1 2.2.2		2 2
3.	EMI	ISSION MONITORING	4
3	3.1 3.2 3.3 3.4	SURFACE WATER MONITORING WASTEWATER MONITORING NOISE MONITORING DUST MONITORING	5 6
4.	SIT	E DEVELOPMENT WORKS	10
4	4.1 4.2 4.3	ENGINEERING WORKS	10 10
5.		STE RECEIVED AND CONSIGNED FROM THE FACILITY	
6.		VIRONMENTAL INCIDENTS AND COMPLAINTS	
	5.1 5.2	INCIDENTS	
7.	ENV	VIRONMENTAL DEVELOPMENT & CONTROL	14
	7.1 7.1.2 7.2 7.2.2 7.2.2 7.3 7.4	ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT Site Management Structure Staff Training ENVIRONMENTAL MANAGEMENT PROGRAMME Schedule of Objectives 2010 Schedule of Objectives 2011 COMMUNICATIONS PROGRAMME REPORT FINANCIAL PROVISION	
	7.5 7.6	NUISANCE CONTROLS	
8.		HER REPORTS	

APPENDIX 1

APPENDIX 2

European Pollutant Release and Transfer Register

Procedures List

1. INTRODUCTION

This is the 2010 Annual Environmental Report (AER) for the Greenstar Environmental Services Ltd. (GES), Materials Recovery Facility (MRF) at Ballymount Cross, Tallaght, Dublin 24 and covers the period January 2010 to December 2010.

The Waste Licence (W0039-02) is held by GES who operated the site during the reporting period from the 1st January 2010 to the 16th June 2010. The facility was subsequently leased and has been operated by Panda Waste Services Ltd. (Panda) under licence from GES from the 17th June 2010 to 31st December 2010.

The content of the AER is based on Schedule B of the licence and the report format follows guidelines set in the "Guidance Note for Annual Environmental Report" issued by the Environmental Protection Agency (Agency)¹.

_

¹ EPA (Environmental Protection Agency) 1999 Waste Licensing – Draft Guidance on Environmental Management Systems and Reporting to the Agency

2. SITE DESCRIPTION

2.1 Site Location and Layout

The facility is located in Ballymount Industrial Estate, Tallaght, Dublin 24. The surrounding area is extensively developed for commercial and light industrial use, with a number of private residences within 250 m of the facility boundary. The site is accessed off the Ballymount Road, which forms the south western boundary.

2.2 Waste Management Activities

The facility is licensed to accept and process 150,000 tonnes of waste per annum, comprising municipal waste, commercial and industrial waste (C&I), waste electronic and electric equipment (WEEE) and construction and demolition waste (C&D). There is no limit set in for each waste stream, provided the total input does not exceed 150,000 tonnes per annum.

2.2.1 Waste Processes

The key processes carried out include: -

- Segregation of recyclable materials (paper, cardboards, plastic, wood, metals, glass) from the Household and C&I wastes;
- Bulking up and transfer of waste to appropriately licensed recycling, recovery and disposal outlets;
- Segregation, bulking and transfer of C&D waste to appropriately licensed recycling, recovery and disposal outlets;

Household Waste

All waste deliveries are weighed on the weighbridge and then directed to the waste transfer building where material is off-loaded onto the floor. Mixed household waste collected in the 'black bin' is transferred to large bulk transporters, and is then either sent to an appropriate licensed landfill or specialised Materials Recovery Facility.

All incoming household skips either are netted or covered. Recyclable material is segregated, where possible, from the waste and transferred off-site to suitable licensed

or permitted recycling facilities. The remaining non-recyclable and residual material is sent to licensed landfill.

The biodegradable wastes that are suitable for composting are sent to an offsite composting facility.

Commercial and Industrial Waste

Both mixed and source segregated waste is delivered to the facility both by Panda and other permitted hauliers. Recyclables are stored in the waste transfer building prior to transfer. Biodegradable wastes suitable for composting are sent to an offsite composting facility. The remaining non-recyclable material is bulked and sent to appropriately licensed landfills.

C&D Waste

Waste loads include mixed construction and demolition wastes and soil and stone. The material arrives in skips of varying sizes. The waste loads are inspected and then processed. The majority of the incoming C&D material is recovered and sent off-site either for re-use or recycling. The non-recyclable materials are transferred to a licensed landfill.

2.2.2 Plant List

A list of the plant in use at the facility is given in Table 2.1. The plant provides 100% duty and 50% standby for waste processing.

Table 2.1 Existing Plant

No.	Plant	Model	Operational Capacity	Standby Capacity
1	Volvo	L150	300	200
1	Volvo	L220	400	250
1	Cat	M318	250	100

3. EMISSION MONITORING

Monitoring of surface water, foul water, noise and dust is carried out in accordance with Condition 9 and Schedule E of the licence. The monitoring locations are shown on Figure 3.1. The monitoring results are submitted to the Agency at quarterly intervals and an overview of the results is presented in this Section.

3.1 Surface Water Monitoring

Rainfall run-off from the roofs and paved yard area is directed to the surface water drainage system. Discharge to the municipal storm sewer is via a grit trap and oil interceptor. There is an inspection point (SW-1) that allows the sampling and inspection of the final surface water discharge to the municipal storm water sewer serving the Industrial Estate. Just after the inspection point inside the facility boundary, there is also a manually operated shut off valve that can be used to stop the discharge of surface water to the municipal storm sewer in the event of an emergency.

Sampling is carried out monthly in accordance with Schedule E, however it was not possible to collect samples at SW-1 in April or December, as there was no flow (due to dry weather conditions) on these occasions. The sampling and analysis was carried out in accordance with recognised quality assurance and control procedures. The range of analysis was as specified in Schedule E and included Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), total suspended solids (TSS), pH, electrical conductivity and oils, fats and greases. The results are included on Table 3.1, which also includes the Emission Limit Values (ELV) set in the licence.

Table 3.1 Surface Water Monitoring Results 2010 SW-1

Parameters	Units	Jan	Feb	Mar	Apr	May	Jun	ELV
pН	pH Units	7.5	7.3	7.4	-	6.9	7.0	6-10
Conductivity	mS/cm	0.859	0.290	0.199	-	0.249	0.240	-
BOD	mg/l	44	40	10	-	<2	>10	20
COD	mg/l	249	72	53	-	27	39	-
TSS	mg/l	26	46	6	-	10	<5	30
OFGs	mg/l	8	2	<1	-	4	6	10

Parameters	Units	Jul	Aug	Sept	Oct	Nov	Dec	ELV
pН	pH Units	7.0	7.0	7.2	7.0	6.97	-	6-10
Conductivity	mS/cm	0.248	0.286	0.217	0.414	0.438	-	-
BOD	mg/l	<47	85	<2	67	95	-	20
COD	mg/l	60	89	65	42	214	-	-
TSS	mg/l	21	47	8	37	32	-	30
OFGs	mg/l	3	<4	<4	<4	< 0.01	-	10

The ELV for BOD was exceeded in January, February, August, October and November 2010. The ELV for TSS was exceeded in February, August, October and November. At the time of monitoring, there had not been any incidents (spill or accidental release). The Agency was informed of these exceedances in accordance with Condition 3.3 and 3.4 of the licence. While the exceedances were unlikely to have a significant impact on the storm water sewer serving the Industrial Estate, an incident investigation identified the need to completely clean out the drainage including the interceptors and this is scheduled for Q1 2011. A regular maintenance programme has also been established.

3.2 Wastewater Monitoring

Wastewater from the truck wash passes through a grit trap and oil interceptor before discharging to the foul sewer serving the Industrial Estate. Rainfall run off from the diesel filling area, which passes through a separate oil interceptor, and run off from the ramp and hard standing area also discharges to the foul sewer. Monitoring is carried out, in accordance with Schedule E of the licence, bi-monthly at one monitoring location (FW-1).

The sampling and analysis was carried out in accordance with recognised quality assurance and control procedures. The range of analysis was as specified in Schedule E and included BOD, COD, TSS, pH, detergents and oils, fats and greases. The results are included on Table 3.2 which also shows the ELVs set in the licence. The discharge was fully compliant with the ELVs.

Wastewater flow is calculated using the water supply meter and daily rainfall data and is reported quarterly. The flow for the reporting period was 2,160 m³.

Table 3.2 Wastewater Monitoring Results 2010 FW-1

Parameter	Units	Jan	Mar	May	Aug	Sept	Nov	Dec	ELV
pН	pH units	6.6	7.4	7.6	8.0	8.9	7.20	6.82	6-10
BOD	mg/l	888	88	187	34	202	137	684	2000
COD	mg/l	1728	344	199	62	550	304	1077	4000
TSS	mg/l	921	164	31	17	248	952	322	1000
Fats Oils Grease	mg/l	50	<1	5	2	31	< 0.01	< 0.01	100
Detergents	mg/l	0.14	< 0.1	<0.1	<0.2	*	0.3	0.8	100

^{* -} Laboratory could not locate sample portion to perform this test

3.3 Noise Monitoring

The annual noise survey was conducted in December 2010 and included both daytime and night time monitoring. The monitoring locations include three points on the boundary (B1 – B3) and one noise sensitive location (NSL1). The survey was conducted when the site was operational and confirmed that noise emissions complied with the licence conditions and was not affecting the nearest sensitive receptors. A summary of the noise results are shown on Tables 3.4 and 3.5.

During the daytime survey, the noise emission measured at NSL1 was 72 dB. The noise environment was dominated by local traffic noise on the Upper Ballymount Road. It was not possible to estimate the contribution specifically attributable to the GES facility, however site operations were inaudible. Therefore it is reasonable to conclude that noise emissions from the facility were likely to have been significantly lower than the 55 dB limit set in the Licence at NSL1.

During the night time survey, there was no noise emission from the GES site apart from an inward and outward truck movement. The GES contribution at NSL1 was estimated at significantly lower than 45 dB.

Table 3.4 Noise Monitoring Results 2010 – Daytime Survey

Station	Time	LA _{eq} 30 min dB	LAF ₁₀ 30 min dB	LAF ₉₀ 30 min dB	Specific level* dB	Noise audible
B1	1428- 1458	51	52	47	<47	GES emissions not significant here due to screening provided by intervening trailers and plant. Onsite front end loader and truck movements audible, although masked by significant road traffic noise offsite on UBR. Bird calls also audible.
B2	1506- 1536	70	73	59	70	Front end loader audible continuously in building and around yard, occasionally approaching sound level meter. Trucks also occasionally passing close to meter. Bird calls. During site lulls, offsite road traffic audible.
В3	1354- 1424	66	67	59	60	Intermittent truck movements through entrance and weighbridge area dominant when present, including when idling on weighbridge. No other GES emissions audible due to dominance of continuous traffic noise on UBR. Only other noise source audible: bird calls.
NS1	1543- 1613	72	75	64	<64	Apart from vehicles through entrance, no GES emissions audible due to continuous dominance of passing road traffic. No other sources audible.

^{*} Specific level: Sound pressure level contribution considered attributable to facility.

Table 3.5 Noise Monitoring Results 2010 – Night-time Survey

Station	Time	LA _{eq} 30 min dB	LAF ₁₀ 30 min dB	LAF ₉₀ 30 min dB	Specific level* dB	Noise audible
B1	2253- 2323	45	46	43	<43	No GES noise sources present, apart from truck arrival 2314 and departure 2318. Traffic on distant roads, particularly M50 to NW, continuously dominant. No other noise audible apart from intermittent traffic on UBR.
B2	2330- 0000	53	59	44	50	No GES noise sources, apart from single waste delivery 2343-2353 (most of this time spent idling on weighbridge). Distant road traffic continuously audible and significant. Intermittent UBR traffic also audible.
В3	2217- 2249	56	60	49	<49	No GES noise sources. Intermittent local traffic on UBR, dominant when present. Distant traffic continuously significant in background, particularly to NW.
NS1	0006- 0036	62	63	45	<45	No GES sources, apart from truck gate 00238 (in) and 0032 (out). Intermittent UBR traffic dominant when present. Distant traffic continuously audible and significant. No other sources audible, apart from aircraft x 1.

^{*} Specific level: Sound pressure level contribution considered attributable to facility.

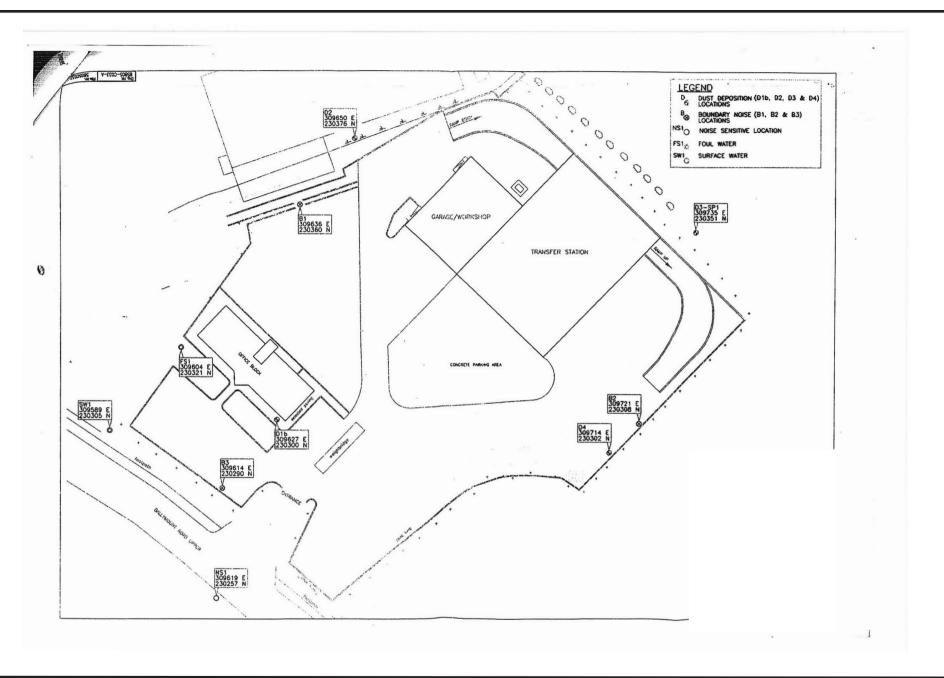
3.4 Dust Monitoring

Dust monitoring was carried out on three occasions in February, May and June in accordance with Schedule E. and the results are included in Table 3.5. Out of the twelve measurements there were two exceedances of the deposition limit (350mg/m²/day). These occurred in February at D2 (485.1 mg/m²/day) and in August at D4 (655.6 mg/m²/day) and the Agency was notified.

Table 3.4 Dust Monitoring Results 2010

	Units	Feb	May	Aug	Deposition Limit Value
D1B	mg/m²/day	224.6	74.1	108.9	350
D2	mg/m²/day	485.1	296.1	314.7	350
D3	mg/m ² /day	88.5	17.3	286.7	350
D4	mg/m ² /day	277.2	*	655.6	350

^{* -} Sample Lost





O' Callaghan Moran & Associates. Granary House, Rutland Street, Cork Ireland.

Tel. (021) 4321521 Fax. (021) 4321522 email: info@ocallaghanmoran.com

This drawing is the property of O'Callaghan Moran & Associates and shall not be used, reproduced or disclosed to anyone without the prior written permission of O'Callaghan Moran & Associates and shall be returned upon request.

GES Ballymount

TITLE

Monitoring Locations

Details

FIGURE NUMBER 3.1

Scale

Not To Scale

Job Number: 1104804

4. SITE DEVELOPMENT WORKS

4.1 Engineering Works

There were no engineering works carried out in 2010. There are no engineering works planned for 2011.

4.2 Summary of Resource & Energy Consumption

Table 4.1 presents an estimate of the resources used on-site during the reporting period.

Table 4.1 Estimate of Resources Used On-Site

Resources	Quantities
Diesel (green)	1000 / litres /week
Electricity	1,367,083 Units
Hydraulic Oil	20 litres / week
Engine Oil	20 litres / week
Anti Freeze	10 litres / week
Odour Neutraliser	20 litres / week

4.3 Bund Integrity Testing

Condition 4.4 of the licence requires that tank and bund testing be carried out at least once every three years. Testing was carried out in 2008 which confirmed the integrity of the infrastructure was fit for purpose and will be repeated in 2011.

5. WASTE RECEIVED AND CONSIGNED FROM THE FACILITY

Table 5.1 shows the total quantities of waste received and consigned from the facility in 2010. Table 5.2 shows the total quantities of waste received and consigned in 2009. A breakdown of the waste types is provided in accordance with the European Waste Catalogue and Hazardous Waste list.

The total quantity of waste received was 90,844.71 tonnes. The total waste consigned was 88,524.72 tonnes. Approximately 495 tonnes of waste remained on site at the end of 2010, which will be consigned in 2011. The remaining difference (approximately 2%) is due to rainwater present in skips which arrive at the facility. The recovery rate is estimated at 65.77%.

Table 5.1 Waste Received & Consigned 2010

EWC	Description	Waste In	Waste Out
15 01 01	Cardboard & Paper Packaging	7,270.62	6,148.60
15 01 02	Plastic Packaging	109.86	549.16
15 01 03	Wooden Packaging	1,009.88	1,665.63
15 01 04	Metallic Packaging	4.56	240.28
15 01 06	Mixed Packaging	528.48	
15 01 07	Glass Packaging	7.26	
16 01 03	Tyres		1.30
16 02 14	White Goods	1,194.06	
17 01 07	Mixed C&D	4.92	
17 09 04	Rubble	524.74	792.88
20 01 01	Paper & Cardboard	35.18	
20 01 02	Glass	10.14	
20 01 08	Commercial Food Waste	1,766.92	487.56
20 01 36	WEEE		1,065.37
20 01 38	Timber	510.66	
20 01 40	Metal	186.08	51.50
20 03 01	Mixed Municipal Waste	66,244.28	65,690.74
20 03 01	Mixed Dry Recyclables	11,437.07	11,729.36
	Total Received	90,844.71	
	Total Consigned		88,524.72
	Total Recovered		58,225.19
	Total Disposed		30,299.53
	Recovery Rate		65.77%

Table 5.2 Waste Received & Consigned 2009

EWC	Description	Waste In	Waste Out
13 05 07*	Oil waste		82.00
15 01 01	Cardboard & Paper Packaging	20,902.00	18,876.00
15 01 02	Plastic Packaging	78.00	
15 01 03	Wooden Packaging	2,178.00	1,554.00
15 01 07	Glass Packaging	11.00	
16 01 03	Tyres	2.00	7.00
16 02 14	White Goods	1,132.00	
16 10 02	Aqueous Liquid Waste		143.00
17 01 07	Mixed C&D	1,296.00	1,536.00
20 01 01	Paper & Cardboard	404.00	73.00
20 01 21*	Fluorescent Tubes		0.20
20 01 11	Textiles	3.00	
20 01 36	WEEE		1,135.00
20 01 40	Metal	435.00	912.00
20 03 01	Mixed Municipal Waste	63,063.00	61,223.00
20 03 01	Mixed Dry Recyclables	7,661	8,293.00
	Total Received	97,167.00	
	Total Consigned		97,011.20
	Total Recovered		76,149.20
	Total Disposed		20,862.00
	Recovery Rate		78.50%

6. ENVIRONMENTAL INCIDENTS AND COMPLAINTS

6.1 Incidents

The routine monitoring programme identified a number of incidents during the reporting period. Five of these related to exceedances of the ELV for surface water and a further two related to exceedances of the dust deposition limit. The Agency was notified of these exceedances in accordance with licence conditions. Apart from the exceedance of the ELVs there were no other incidents.

6.2 Register of Complaints

Panda maintains a register of the complaints received at the site. Three complaints were received during the reporting period (two in August and one in October) in relation to odour. These were immediately addressed by the Facility Management.

7. ENVIRONMENTAL DEVELOPMENT & CONTROL

7.1 Environmental Management Programme Report

Panda has taken on the Environmental Management System (EMS) developed for the facility. The schedule of Objectives and Targets developed by GES, including their status for 2010 (Table 7.1), as well as the proposed Objectives and Targets for 2011 (Table 7.2) are presented below. An index of procedures used at the facility is included in Appendix 1.

7.1.1 Site Management Structure

Management and Staffing structure: -

Name: Eamon Waters

Responsibility: Managing Director Panda

Experience: 20 years experience waste management experience

Name: David Jervis

Responsibility: Operations Manager Panda

Experience: 10 years experience waste management experience; has completed the

FÁS waste management course.

Name: David Naughton

Responsibility: Environmental Manager Panda

Experience: 6 years experience waste management experience; has completed the

FÁS waste management course.

Name: Brian Crinion

Responsibility: Health and Safety Manager Panda

Experience: 20 years experience waste management experience; has completed the

FÁS waste management course.

7.1.2 Staff Training

It was not necessary to carry out staff training in 2010, training will be carried out as needed in 2011.

7.2 Environmental Management Programme

7.2.1 Schedule of Objectives 2010

The objectives that were achieved during this reporting period are outlined in Table 7.1. Details on the progress made are also included on the table and an evaluation of what has been achieved to date is presented below.

Objective 1 – To achieve ongoing compliance with SW and FW ELVs

It had been proposed to install a 'Downstream Defender' downstream of the surface water discharge. Following an assessment of the system and the likely benefits, this was not deemed practical.

Objective 2 – Maintain Compliance on all GES sites

This objective related to the former operator of the site (GES).

Objective 3 – Reduce Energy and Water Consumption

An energy Audit was not carried out in 2010

Objective 4 – Support Environmental Awareness

Panda have a communications policy in place which is available to members of the public.

7.2.2 Schedule of Objectives 2011

A schedule of targets and objectives for 2011 has been set by the management of the facility. These objectives are outlined in Table 7.2.

7.3 Communications Programme

Panda has drawn up a Communications Programme, which details how members of the public are facilitated in accessing environmental information at the facility. Members of the public who wish to inspect these files may do so ant any reasonable time by making an appointment

with the Operations Manager using the telephone number posted on the main facility entrance sign.

7.4 Report Financial Provision

GES has accrued over €3,000,000 in funds, to provide for any potential environmental liabilities. GES has adequate insurance cover for environmental liabilities to €6,350,000 for any one occurrence, which will apply to "sudden identifiable and unintended incidents".

7.5 Nuisance Controls

A vermin control company, Cannon Hygiene, is contracted to carry out nuisance control at the facility.

7.6 European Pollutant Release and Transfer Register Regulation

Under the European Pollutant Release and Transfer Register Regulation (EC) No. 166/2006 GES are required to submit information annually to the Agency. A copy of the information submitted to the Agency via the web-based data reporting system is included in Appendix 2.

Table 7.1 Objectives and Targets for 2010

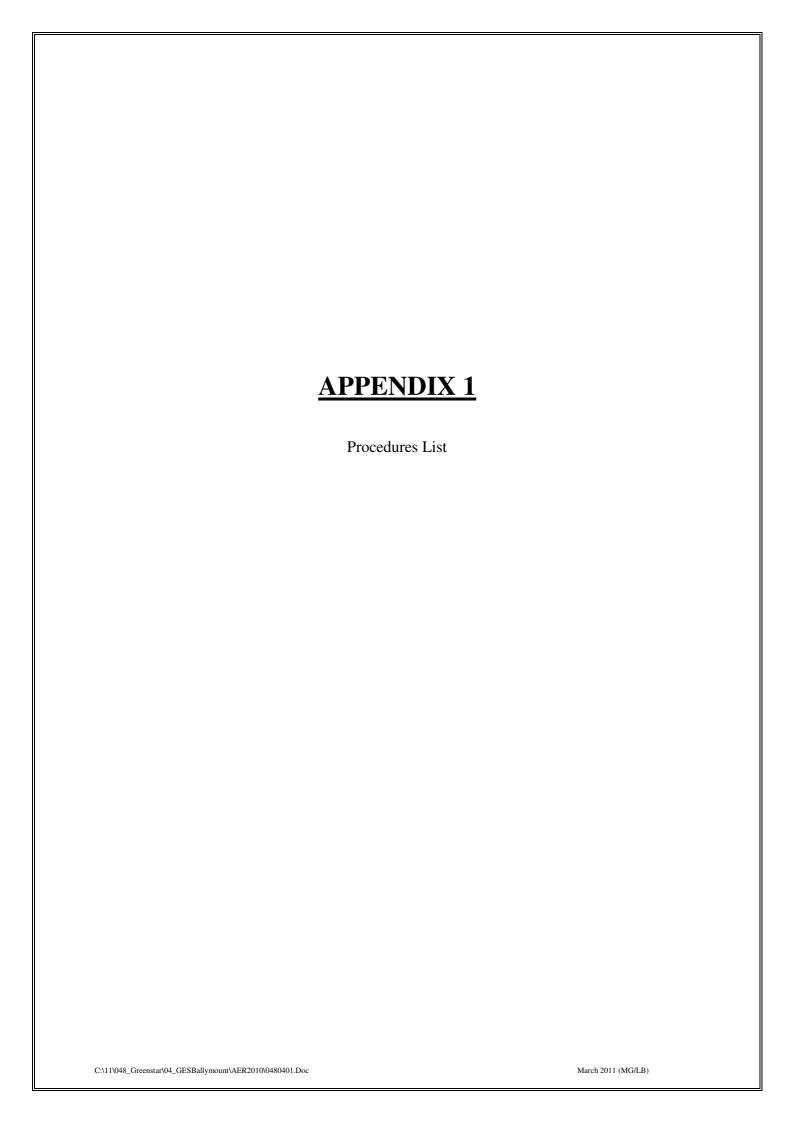
No	Activity	Target	Responsibility	Timescale		
1	To achieve ongoing compliance with SW and FW ELV's	Install and commission Downstream Defender	PM			
2	Maintain Compliance on all GES sites	Receive no penalties for breach of relevant Environmental legislation Continue to strive for Zero non compliances - all site inspections and assessments	PM/GW	Dec 2010		
3	Reduce Energy and Water Consumption	Energy audit	PM/ML	Dec 2010		
4	Support Environmental Awareness	Promote World Environmental Day Implement Environmental programs	PM	Dec 2010		

Table 7.2 Schedule of Objective and Targets 2011

No	Objective	Target	Responsibility	Timescale
1	Review and Assess the Effectiveness of Nuisance Control Procedures	Continually review and assess all nuisance control procedures to ensure minimal impact on the surrounding area.	Site Management	Q4 2011
2	Pollution Prevention	Strive to ensure that monitoring results comply with the licence limits and investigate any exceedances of emission limit values.	Site Management	Q4 2011
3	Improve Dust Mitigation Measures	Install Dust curtains on the entrance/exit to the MRF building	Site Management	Q2 2011
4	Improve MRF Floor Layout	Assess and upgrade the MRF floor layout and rearrange in order to improve waste segregation practices.	Site Management	Q2 2011
5	EMS	Revise waste procedures and emergency response plans for the facility.	Site Management	Q3 2011

8. OTHER REPORTS

No other reports were requested by the Agency.

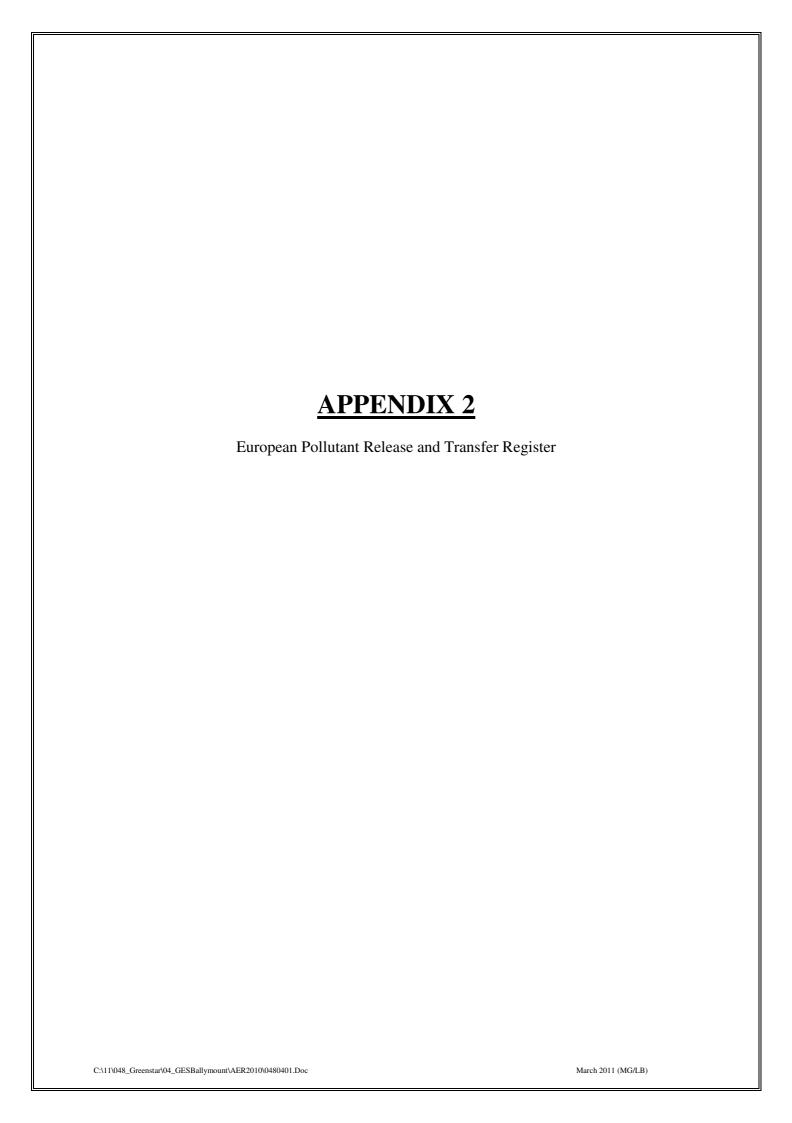


DOCUMENT	Ballymount EPA Waste Licence W0039-02
TYPE	
TITLE	Complete Procedures list
	Controlled Document



Ref	Procedure	Issue	Date
		No.	
	EMS standard procedures		
SOP 001	Document & Record control	1	06/09/2010
SOP 002	Management Review	1	06/09/2010
SOP 004	Objectives & Targets, Environmental Management Programme	1	06/09/2010
SOP 005	Environmental Legal & Regulatory Requirements	1	06/09/2010
SOP 007	Environmental Complaints	1	06/09/2010
SOP 008	Non-Conformance & Corrective & Preventive action	1	06/09/2010
	Operating Procedures		
SOP 014	Facility Inspection	1	06/09/2010
SOP 018	Unacceptable Waste	1	06/09/2010
SOP 019	Nuisance Management	1	06/09/2010

DOCUMENT NUMBER	SOP List	ISSUE DATE	06/09/10	REVISION NUMBER	`	PAGE 1 of 1	ISSUED BY	S B	AUTHORISED BY	S B
								-		-





| PRTR# : W0039 | Facility Name : Greenstar Environmental Services (Ireland) Limited | Filename : W0039_2010.xls | Return Year : 2010 |

Guidance to completing the PRTR workbook

AER Returns Workbook

Version 1.1.11

REFERENCE YEAR 2010

1. FACILITY IDENTIFICATION

,	
Parent Company Name Gr	reenstar Environmental Services Limited
Facility Name Gr	reenstar Environmental Services (Ireland) Limited
PRTR Identification Number W	/0039
Licence Number W	/0039-02

Waste or IPPC Classes of Activity

No.	class_name
	Repackaging prior to submission to any activity referred to in a
3.12	preceding paragraph of this Schedule.
	Blending or mixture prior to submission to any activity referred to in
3.11	a preceding paragraph of this Schedule.
	Storage prior to submission to any activity referred to in a preceding
	paragraph of this Schedule, other than temporary storage, pending
3.13	collection, on the premises where the waste concerned is produced.
	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
4.13	produced.
	Recycling or reclamation of organic substances which are not used
	as solvents (including composting and other biological
	transformation processes).
4.3	Recycling or reclamation of metals and metal compounds.
	Recycling or reclamation of other inorganic materials.
	Ballymount Cross
Address 2	
Address 3	Dublin 24
Address 4	
Country	
Coordinates of Location	
River Basin District	
NACE Code	
	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	
AER Returns Contact Email Address AER Returns Contact Position	
AER Returns Contact Position AER Returns Contact Telephone Number	
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	
Production Volume	
Production Volume Units	
Number of Installations	
Number of Operating Hours in Year	
Number of Employees	
User Feedback/Comments	
Web Address	
17CD Addic33	

2. PRTR CLASS ACTIVITIES

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
3. SOLVENTS REGULATIONS (S.I. No. 543 of 200)2)
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 ?	

| PRTR# : W0039 | Facility Name : Greenstar Environmental Services (Ireland) Limited | Filename : AER Status 2010.xls | Return Year : 2010 | Page 2 of 2

4.1 RELEASES TO AIR

Link to previous years emissions data

| PRTR#: W0039 | Facility Name: Greenstar Environmental Services (Ireland) Limited | Filename: W0039_2010.xls | Return Year: 2010 |

01/04/2011 12:02

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

	Please enter all quantities in this section in KGs								
POLLUTANT			ME	THOD		QUANTITY			
		Method Used							
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (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 AIR		Please enter all quantities in this section in KGs							
F	POLLUTANT			METHOD	QUANTITY					
				Method Used						
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accide	ental) 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)

		Please enter all quantities in this section in KGs								
POLLUTANT			MET	THOD	QUANTITY					
			Method Used							
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) K	G/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

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 only report their Net methane (CH4) emission to the environment under T(total) KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:

Landfill:

Greenstar Environmental Services (Ireland) Limited

Please enter summary data on the quantities of methane flared and / or utilised			Meth	nod Used		
				Designation or	Facility Total Capacity m3	
	T (Total) kg/Year	M/C/E	Method Code	Description	per hour	
Total estimated methane generation (as per						
site model)	0.0				N/A	
Methane flared	0.0				0.0	(Total Flaring Capacity)
Methane utilised in engine/s	0.0				0.0	(Total Utilising Capacity)
Net methane emission (as reported in Section						
A above)	0.0				N/A	

4.2 RELEASES TO WATERS

Link to previous years emissions data

PRTR# : W0039 | Facility Name : Greenstar Environmental Services (Ireland) Limited | Filename : W0039_2010.xls | Return Year : 2010 |

01/04/2011 12:02

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

Data on ambient monitoring of storm/surface water or groundwater, conducted as part of your licence requirements, should NOT be submitted under AER / PRTR Reporting as t

	RELEASES TO WATERS	Please enter all quantities in this section in KGs						
POI	LUTANT						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/Y	ear F (Fugitive) KG/Year
					0	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 KGs							
POI	LUTANT						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		

^{*} 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 quantities in this section in KGs				
POI	LUTANT						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	
					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

4.3 RELEASES TO WASTEWATER OR SEWER

Link to previous years emissions data

| PRTR# : W0039 | Facility Name : Greenstar Environmental Services (Ireland) Limited | Filename : W0

01/04/2011 12:03

SECTION A : PRTR POLLUTANTS

	DFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREAT	MENT OR	SEWER		Please enter all quantities in this section in KGs			
	POLLUTANT			METHOD	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

^{*} 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)

SECTIO	SECTION B: REMAINING POLLUTANT EMISSIONS (as required in your Licence)												
	OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATN	MENT OR			Please enter all quantities in this section in KGs								
	POLLUTANT			METHOD			QUANTITY						
			Method Used		FW-1								
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					
				Calculated based on annual									
				flow rate. Analysis is ISO									
303	BOD	С	PER	accredited	685.0286	685.0286	0.0	0.0					
				Calculated based on annual									
				flow rate. Analysis is ISO									
306	COD	С	PER	accredited	1315.749	1315.749	0.0	0.0					
				Calculated based on annual									
				flow rate. Analysis is ISO									
240	Suspended Solids	С	PER	accredited	819.2571	819.2571	0.0	0.0					
				Calculated based on annual									
				flow rate. Analysis is ISO									
314	Fats, Oils and Greases	С	PER	accredited	47.52	47.52	0.0	0.0					
				Calculated based on annual									
				flow rate. Analysis is ISO									
308	Detergents (as MBAS)	С	PER	accredited	0.8928	0.8928	0.0	0.0					
	*Ode at a second of the of the second of the odd to the												

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

Link to previous years emissions data

4.4 RELEASES TO LAND

Link to previous years emissions data

| PRTR# : W0039 | Facility Name : Greenstar Environmental Services (Ireland) Limited | Filename : W0039_2010.xls | Return Year : 2010 |

01/04/2011 12:03

SECTION A : PRTR POLLUTANTS

	RELEASES TO LAND				Please enter all quantities		
	POLLUTANT		METH	IOD			QUANTITY
			M	ethod Used			
No. Annex II	Name	M/C/E	Method Code	Designation or Description	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) then click the delete button

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

	RELEASES TO LAND			Please enter all quantities		
	POLLUTANT		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
				0.0)	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# : W0039 | Facility Name : Greenstar Environmental Services (Ireland) Limited | Filename : W0039_2010.xls | Return Year : 2010 |

S. CHOILE HILAIM	LINI & OIT SITE THAI		Please enter	all quantities on this sheet in Tonnes	ntai Oci vioco (ire	idila) Lillin	ed Filerianie . W0039_20	TO.NS Hotalii Teal . 20	10			35
			Quantity (Tonnes per Year)		N/		Method Used		Haz Waste: Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	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)
Transfer Destination	European Waste Code	Hazardous		Description of Waste	Waste Treatment Operation	M/C/E	Method Used	Location of Treatment				
				·						Ballymount		
Within the Country	15 01 01	No	1153.3	B paper and cardboard packaging	R13	М	Weighed	Offsite in Ireland	IPR,WPR 021/12	Road, Walkinstown, Dublin 12,.,Ireland Rosemount Business Park, Ballycoolin		
Within the Country	15.01.01	No	1470.00) nanay and acydhaayd naakasina	D10	М	Waishad	Offsite in Ireland	Bailey Waste Recycling, WFP FG-0008-02-01	- Road,Blanchardstown,Dublin 15,Ireland		
Within the Country To Other Countries	15 01 01	No No		B paper and cardboard packaging Department packaging	R13 R3	M	Weighed Weighed	Abroad	FG-0008-02-01	.,,,,,China		
							3			Severn Farm Industrial		
To Other Countries	15 01 01	No	26.52	2 paper and cardboard packaging	R3	М	Weighed	Abroad	Parry & Evans, NOW/268322	Estate, Welshpool, Powys, SY		
	15 01 01	No		B paper and cardboard packaging	R3	M	Weighed	Abroad		.,,,,,United Kingdom		
				, hate an exercise bare 120 2			3			Ballymount		
Within the Country	15 01 02	No	447 5	5 plastic packaging	R13	М	Weighed	Offsite in Ireland	IPR,WPR 021/12	Road, Walkinstown, Dublin 12,., Ireland		
within the Country	15 01 02	INU	447.0	plastic packaging	nis	IVI	weighed	Olisite III lielaliu	11 11, 11 11 02 1/12	121 Camlough		
									Greentar Environmental	Road, Bessbrook, Newry, Co.		
To Other Countries	15 01 02	No	101.66	S plastic packaging	R3	М	Weighed	Abroad	Services,LN-10-18-T	Down, United Kingdom Beauparc, Navan, Co.		
Within the Country	15 01 03	No	827.35	wooden packaging	R13	М	Weighed	Offsite in Ireland	Panda Waste,W0140-02	Meath,.,Ireland		
145:11:11	15.04.00		000.00		D0			0" "	Conroy Recycling	Sonna, Mullingar, Co.		
Within the Country	15 01 03	No	838.28	B wooden packaging	R3	М	Weighed	Offsite in Ireland	Company,WP-152-2006	Westmeath,,,Ireland Blessington,Co.		
Within the Country	15 01 04	No	240.28	metallic packaging	R4	M	Weighed	Offsite in Ireland	Multi Metals, ESS/15/8/12	Wicklow,,,,,lreland		
Within the Country	16 01 03	No	13	8 end-of-life tyres	R5	М	Weighed	Offsite in Ireland	Crumb Rubber,WP 2007/01	Dromiskin, Dundalk, Co. Louth,., Ireland		
Traini are country	100100			mixed construction and demolition wastes			Troigilou					
Mish: Alex Ossestes	47.00.04	NI-	454.40	other than those mentioned in 17 09 01, 17 2 09 02 and 17 09 03	DE	М	Material	Offsite in Ireland	Marrakesh Limited, W0048-	Kilmurry South, Bray, Co.		
Within the Country	17 09 04	No	451.42	mixed construction and demolition wastes	R5	IVI	Weighed	Offsite in freiand	UI	Wicklow,.,Ireland		
				other than those mentioned in 17 09 01, 17						Beauparc, Navan, Co.		
Within the Country	17 09 04	No	341.46	6 09 02 and 17 09 03 sludges from treatment of urban waste	R13	М	Weighed	Offsite in Ireland	Panda Waste,W0140-02	Meath,.,Ireland Beauparc,Navan,Co.		
Within the Country	19 08 05	No	102.34		D13	М	Weighed	Offsite in Ireland	Panda Waste,W0140-02	Meath,,,Ireland		
Within the Country	20.01.00	No	000.74	I biodogradable kitchen and centeen weets	Do	м	Waishad	Officite in Ireland	Acers Decueling W0040 01	Littleton,Co.		
Within the Country	20 01 08	No	269.74	biodegradable kitchen and canteen waste	R3	М	Weighed	Offsite in Ireland	Acorn Recycling, W0249-01 Galway City Council, W0013-	Tipperary,,Ireland Carrowbrowne,Headford		
Within the Country	20 01 08	No	139.1	biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland		Road, Galway ,,, Ireland		
										Killeen Road,Ballyfermot,Dublin		
Within the Country	20 01 08	No	25.78	B biodegradable kitchen and canteen waste	R3	М	Weighed	Offsite in Ireland	Thorntons,W0044-02	10,.,lreland		
									D W W0440.00	Beauparc, Navan, Co.		
Within the Country	20 01 08	No	52.94	biodegradable kitchen and canteen waste	R3	М	Weighed	Offsite in Ireland	Panda Waste,W0140-02	Meath,.,Ireland Woodstock Industrial		
Within the Country	20 01 36	No	0.18	discarded electrical and electronic equipment other than those mentioned in 20 3 01 21, 20 01 23 and 20 01 35	R5	М	Weighed	Offsite in Ireland	Irish Lamps Recycling,WFP	Estate,Kilkenny Road,Athy,Co. Kildare,Ireland		
			2.10	discarded electrical and electronic			3			Unit 51 Park West Industrial		
Within the Country	20 01 36	No	204.00	equipment other than those mentioned in 20 3 01 21, 20 01 23 and 20 01 35	R5	М	Weighed	Officito in Iroland	TechRec Irl,W0233-01	Estate,Nangor Road,Dublin 12,.,Ireland		
within the Country	20 01 30	140	204.00	discarded electrical and electronic	110	IVI	vveigned	Onsite in heland	recinited III, VV 0233-01	12,.,11814110		
				equipment other than those mentioned in 20					NIMB D. II. WALL STATE	Keady, Portadown, Co.		
To Other Countries	20 01 36	No	781.11	01 21, 20 01 23 and 20 01 35	R5	М	Weighed	Abroad	NWP Recycling,WML 03/24	Armagh,,,United Kingdom Blessington,Co.		
Within the Country	20 01 40	No	43.76	6 metals	R4	М	Weighed	Offsite in Ireland	Multi Metals,ESS/15/8/12	Wicklow,,,,,Ireland		
Within the Country	20.01.40	No	7.74	I metals	R4	М	Weighed	Offsite in Ireland	Panda Waste, W0140-02	Beauparc,Navan,Co. Meath,.,Ireland		
Triumin the Country	200140	140	7.74	motaid	1.44	IVI	** eigneu	Justic III II etallu	1 anda **asic, **U140-02	wodin,.,iiciand		

01/04/2011 12:03

										Haz Waste : Name and			
										Licence/Permit No of Next			
				Quantity						Destination Facility Non	Haz Waste : Address of Next	Name and License / Permit No. and	
										Haz Waste: Name and	Destination Facility	Address of Final Recoverer /	Actual Address of Final Destination
				(Tonnes per						Licence/Permit No of	Non Haz Waste: Address of	Disposer (HAZARDOUS WASTE	i.e. Final Recovery / Disposal Site
				Year)				Method Used		Recover/Disposer	Recover/Disposer	ONLY)	(HAZARDOUS WASTE ONLY)
						Waste							
		European Waste				Treatment			Location of				
	Transfer Destination	Code	Hazardous		Description of Waste	Operation	M/C/E	Method Used	Treatment				
ı											Beauparc, Navan, Co.		
	Within the Country	20 03 01	No	34636.93	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Panda Waste, W0140-02	Meath,Ireland		
					•			- 3			Ballynagran, Coolbeg and		
										Greenstar Holdings	Kicandra.Co.		
	Within the Country	20 03 01	No	5325 44	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Limited.W0165-02	WicklowIreland		
	Triamir and oddinary	20 00 0.		0020.11	mixed maniopal vacto	20		Troignou		Greenstar Holdings	Knockharley, Kentstown, Co.		
	Within the Country	20 03 01	No	224.02	mixed municipal waste	D5	М	Weighed		Limited,W0146-01	MeathIreland		
	William the Country	20 03 01	INO	324.02	mixed municipal waste	D3	IVI	vveigneu	Olisite III lielaliu	Lillited, VVO140-01	Whiteriver		
										Louth County Council, W0060			
		00 00 04		070.00	and the second state of the second	D.F.		Maria I					
	Within the Country	20 03 01	No	978.92	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	02	Louth,.,Ireland		
					and the second second					D 111 14 140004 04	Drehid Landfill,Naas,Co.		
	Within the Country	20 03 01	No	23568.81	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Bord Na Mona,W0201-01	Kildare,.,Ireland		
											Crag Avenue, Clondalkin		
										Greyhound Recycling &	Industrial Estate, Clondalkin		
	Within the Country	20 03 01	No	856.62	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Recovery,W0205-01	,Dublin 22,Ireland		
										Clearpoint Recycling, WP035-			
	Within the Country	20 03 01	No	7642.03	mixed dry recyclables	R13	M	Weighed	Offsite in Ireland	02	Suir,Co. Tipperary,.,Ireland		
										Dillons Waste, WFP-KY-10-	The Kerries, Tralee, Co.		
	Within the Country	20 03 01	No	1760.02	mixed dry recyclables	R13	M	Weighed	Offsite in Ireland	001	Kerry,.,Ireland		
	•												
											Shepherds Drive, Carnbane		
										Re-Gen Waste Ltd, WML 22-	Industrial Estate, Newry, BT35		
	To Other Countries	20 03 01	No	89.72	mixed dry recyclables	R13	M	Weighed	Abroad	25	6JQ,United Kingdom		
					,,			- 3			Weir Road Business		
											Park.Tuam.Co.		
	Within the Country	20 03 01	No	32 44	mixed dry recyclables	R13	М	Weighed	Offsite in Ireland	WERS.WFP-G-09-0002-01	GalwayIreland		
	Within the Country	20 00 01	140	02.44	mixed dry recyclables	1110		Weighted	Onsite in ireland	WENG, WIT G 05 0002 01	Beauparc, Navan, Co.		
	Within the Country	20 03 01	No	1074.49	mixed dry recyclables	R5	М	Weighed	Offeite in Ireland	Panda Waste, W0140-02	Meath,,,Ireland		
	within the Country	20 00 01	140	1074.45	mixed dry recyclables	110	IVI	**eigneu	Onsite in Heland	1 anda **asic,**0140-02	Fassaroe, Bray, Co.		
	Mithin the Country	20.02.04	No	1116.04	mixed dry recyclables	R13	М	Majahad	Officite in Ireland	Greenstar Limited,W0053-03			
	Within the Country	20 03 01	No	1116.24	mixed dry recyclables	nis	IVI	Weighed	Offsite in freiand	Greenstar Limited, W0053-03	Millennium Business		
	Maria 11 0 1	00.00.01				D40		144 1 1 1	0" "	0	Park, Grange, Ballycoolin, Dubl		
	Within the Country	20 03 01	No	14.42	mixed dry recyclables	R13	M	Weighed	Offsite in Ireland	Greenstar Limited,W0183-01	ın 11,Ireland		

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