



**ANNUAL ENVIRONMENTAL REPORT**  
**GREENSTAR ENVIRONMENTAL SERVICES LIMITED**  
**MATERIALS RECOVERY FACILITY**  
**SIX CROSS ROADS BUSINESS PARK**  
**WATERFORD**  
**LICENCE NO. W0177-03**  
**JANUARY 2010 – DECEMBER 2010**

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## 1. INTRODUCTION

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This is the 2010 Annual Environmental Report (AER) for the Greenstar Environmental Services Ltd. (GES), Materials Recovery Facility (MRF) at Six Cross Roads Business Park, Waterford (W0177-03) and covers the reporting period January 2010 to December 2010.

The content is based on Schedule F of the Waste Licence and the report format follows guidelines set in the “Guidance Note for Annual Environmental Report” issued by the Environmental Protection Agency (Agency)<sup>1</sup>.

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 EPA (Environmental Protection Agency) 1999 Waste Licensing – Draft Guidance on Environmental Management Systems and Reporting to the Agency

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## 2. SITE DESCRIPTION

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### 2.1 Site Location and Layout

The subject site is located at Carriganard, Six Cross Roads approximately 3.5 km southwest of Waterford City Centre. It is in an industrial area on the outskirts of the City. The area to the west of the facility is mainly farmland. The nearest residential area is the Ballybeg housing estate, which is approximately 500 m to the north. The facility encompasses approximately 9,300 m<sup>2</sup> and is accessed by a county road (Green Road) off the N25 National Primary Route. This county road, which forms the western site boundary, is a cul-de-sac which is used solely for access to the facility and the adjoining composting facility. The southern and eastern boundaries are formed by the Six Cross Roads Business Park.

There are two waste processing buildings. The Main Building houses the offices and Commercial and Industrial waste (C&I) recycling activities and bulk waste transfer. The Lean-To, which is to the west of the Main Building, is used for covered timber, green waste and bulky waste processing and additional bale storage. The open yard areas are paved and are used for external waste storage bays (C&D, glass, and metals), skip storage, truck parking and a vehicle washing area.

### 2.2 Waste Management Activities

The facility is licensed to accept and process 80,000 tonnes of waste per annum, comprising household waste, construction and demolition waste (C&D) and commercial and industrial waste (C&I).

#### 2.2.1 Waste Types & Processes

The facility is licensed to accept the following waste types and quantities, as specified in Schedule A of the licence: -

- Household (25,000 tonnes)
- Commercial & Industrial (70,000 tonnes)
- Construction & Demolition (5,000 tonnes)

No hazardous wastes are accepted at the facility. The maximum tonnage of each waste type accepted, may be altered with the prior agreement of the Agency as long as the total maximum tonnage is not exceeded.

The key processes carried out at the facility include: -

- Segregation of recyclable materials (paper, cardboards, plastic, wood, metals, glass);
- Recycling of hard plastics through granulation;
- Bulking up of Municipal Solid Waste;
- Segregation and bulking of C&D waste;
- Transfer of recovered and residual materials to appropriately licensed recycling, recovery and disposal outlets;

### *Household Waste*

Residual or black bin household waste arrives in refuse collection vehicles and is transferred from the vehicles into large bulk transporters for consignment to an appropriately licensed landfill. Source segregated household dry recyclables are baled and stored prior to transfer to permitted/licensed off-site recycling facilities.

### *Commercial and Industrial Waste*

Both mixed and segregated commercial waste is collected from commercial sources. Commercial waste containing recyclable material (paper, cardboard, glass, metal, green waste and wood) is delivered to the facility both by permitted third party hauliers and by GES vehicles. Plastic, card and paper are baled and stored prior to transfer to a suitable permitted/licensed off-site recycling outlet. Biodegradable wastes suitable for composting which is accepted at the facility are sent to an offsite composting facility. The remaining non-recyclable material is bulked and sent to appropriately licensed landfills. Recycling of hard plastics (PVC and Polypropylene) takes place on site for transport as raw materials for plastic goods manufacturers.

### *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 Plant List**

<b>No.</b>	<b>Plant</b>	<b>Model</b>	<b>Operational Capacity tpd</b>	<b>Standby Capacity tpd</b>
1	Loading Shovel	Volvo L90F	200	120
2	Excavating Grab	Caterpillar 312	150	100
1	Wood Shredder	Doppstadt	160	150

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### 3. EMISSION MONITORING

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The monitoring required under Condition 6 and Schedule C of the licence includes surface water, wastewater, groundwater, dust and noise monitoring. The monitoring locations are shown on Figure 3.1. As per Schedule E of the licence, monitoring results are included in reports submitted to the Agency at quarterly intervals. An overview of the results of the monitoring is presented in this Section.

#### 3.1 Surface Water Monitoring

The facility surface water drainage system collects run-off from paved areas and roof rainwater and discharges at three separate locations to a culverted stream serving the Business Park. There are four monitoring locations (SW-1, SW-2, SW-3 and SW-4) which are shown on Figure 3.1. Surface water monitoring is carried out weekly in accordance with Schedule C of the licence.

SW-1 is on the outfall from an oil interceptor serving the yard areas to the east and west of the main recycling building. SW-2 is the runoff from the roof of the main recycling building. The flow through SW-1 (yard) combines with that through SW-2 (roof) and discharges to the culverted stream to the west of the site. SW-3 is downstream of an oil interceptor on the drain that takes runoff from the western yard, and is a separate discharge point. SW-4 monitors the discharge from the roof of the lean-to in the north western section of the site. It is understood that this discharges directly to the culverted stream.

The results are shown on Tables 3.1 to 3.4 which also include the warning and action levels proposed by the facility in Q1 2010. There were a number of exceedances of the warning and action levels for both ammonia and conductivity during the monitoring period. The cause of the exceedances is not known but could be attributable to excessive dry periods at the time of sampling and/or stagnant water at the time of monitoring.



**Table 3.1** Surface Water Monitoring Results 2010 SW-1

Parameter	Units	12/01	20/01	25/01	01/02	19/03	25/03	19/04	30/04	Warning Levels	Action Level
Ammonia	mg/l	0.83	0.35	0.37	0.75	4.60	0.30	0.075	3.38	2.0	4.4
Conductivity	mS/cm	0.295	0.456	0.468	0.491	0.371	0.313	0.107	0.288	0.466	0.774

Parameter	Units	19/05	08/06	28/06	29/06	16/07	06/09	09/11	Warning Levels	Action Level
Ammonia	mg/l	5.45	0.311	9.28	7.55	0.996	7.19	7.04	2.0	4.4
Conductivity	mS/cm	0.384	0.212	0.377	0.255	0.212	0.469	0.568	0.466	0.774

**Table 3.2** Surface Water Monitoring Results 2010 SW-2

Parameter	Units	12/01	20/01	25/01	01/02	19/03	25/03	19/04	30/04	Warning Levels	Action Level
Ammonia	mg/l	0.25	-	-	-	-	-	-	1.59	2.0	4.4
Conductivity	mS/cm	0.096	-	-	-	-	-	-	0.230	0.466	0.774

- = Sample could not be taken due to dry weather conditions

Parameter	Units	19/05	09/06	28/06	29/06	16/07	06/09	09/11	Warning Levels	Action Level
Ammonia	mg/l	0.551	-	-	3.42	-	0.214	-	2.0	4.4
Conductivity	mS/cm	0.221	-	-	0.105	-	0.110	-	0.466	0.774

**Table 3.3** Surface Water Monitoring Results 2010 SW-3

Parameter	Units	12/01	20/01	25/01	01/02	19/03	25/03	19/04	30/04	Warning Levels	Action Level
Ammonia	mg/l	0.74	-	-	-	#	#	0.066	4.13	2.0	4.4
Conductivity	mS/cm	0.296	-	-	-	#	#	0.105	0.291	0.466	0.774

# - Shut off due to presence of firewater  
 - Sample could not be taken due to dry weather conditions

Parameter	Units	19/05	09/06	28/06	29/06	16/07	06/09	09/11	Warning Levels	Action Level
Ammonia	mg/l	6.4	0.511	8.97	6.6	0.907	0.612	3.28	2.0	4.4
Conductivity	mS/cm	0.411	0.223	0.630	0.427	0.398	0.457	0.451	0.466	0.774

**Table 3.4** Surface Water Monitoring Results 2010 SW-4

Parameter	Units	12/01	20/01	25/01	01/02	19/03	25/03	19/04	30/04	Warning Levels	Action Level
Ammonia	mg/l	0.28	-	-	-	-	-	-	1.48	2.0	4.4
Conductivity	mS/cm	0.094	-	-	-	-	-	-	0.230	0.466	0.774

- = Sample could not be taken due to dry weather conditions

Parameter	Units	19/05	09/06	28/06	29/06	16/07	06/09	09/11	Warning Levels	Action Level
Ammonia	mg/l	0.542	-	-	3.06	-	0.267	0.48	2.0	4.4
Conductivity	mS/cm	0.222	-	-	0.103	-	0.110	0.207	0.466	0.774

### 3.2 Foul water Monitoring

Schedule C of the licence requires quarterly sampling of the wastewater discharge (vehicle cleaning and run off from hard-standing at the entrance to the main recycling building) to the municipal sewer. The wastewater passes through a petrol/oil interceptor before discharging to the municipal sewer. Flow is measured using a continuous flow meter. The wastewater sampling is carried out quarterly at location FW-1, as shown on Figure 3.1. FW-1 is downstream of the interceptor and the continuous flow meter. The monitoring results are included on Table 3.5. The table also includes the emission limit values (ELV) set in the Licence. The ELV for surfactants was marginally exceeded in November 2010. Excluding this the discharge was compliant with the discharge limits. Due to an oversight no sample was collected in Q2 2010.

**Table 3.5** Foul water Monitoring Results 2010.

Parameter	Units	Q1	Q2	Q3	Q4	Emission Limit
pH	pH Units	6.8	-	7.3	7.75	6 – 9
Temperature	°C	7.0	-	-	11.0	18
BOD	mg/l	35.2	-	37	79	400
COD	mg/l	127	-	72	119	1,100
Total Suspended Solids	mg/l	122	-	134	57	300
Oils, Fats & Greases	mg/l	5.5	-	6	8	10
Surfactants (MBAS)	mg/l	0.2	-	<0.1	0.516	0.2

### 3.3 Groundwater Monitoring

Groundwater monitoring is not required under the licence conditions, however in agreement with the Agency, monitoring is carried out bi-annually at the facility. Monitoring is carried out at two wells BH-1 and BH-3. BH-1 is located off-site in the adjoining Waterford City Council Composting facility (W0234-01) and BH-3 is located on-site as shown on Figure 3.1. There are no emission limits or trigger levels set in the licence and so the results are compared to the Interim Guideline Values (IGV) on groundwater quality published by the Agency. The results are shown on Table 3.6 and 3.7.

The monitoring in July showed that the groundwater quality is good. Elevated levels of ammoniacal nitrogen were detected at both locations in December 2010. It is assumed that the results of analysis in December are anomalous as the levels detected in July and during previous groundwater monitoring carried out in 2009 were below the IGV. Further groundwater monitoring in 2011 will establish whether this was an erroneous result.

**Table 3.6** Groundwater Monitoring Results –July 2010

Parameter	Units	BH-1	BH-3	IGV
BOD	mg/l	2	3	-
TSS	mg/l	1484	878	-
Dissolved Oxygen	%	93.9	95.2	NAC
Oils, Fats & Greases	mg/l	<1	<1	-
Total Phosphorus	mg/l	0.17	0.31	-
Ammoniacal Nitrogen	mg/l	0.01	0.01	0.12
Conductivity	mS/cm	0.696	0.511	1.000
DRO	mg/l	<0.01	<0.01	0.01
Aliphatic Hydrocarbons	mg/l	<0.01	<0.01	-
Undecane	mg/l	<0.01	<0.01	-

**Table 3.7** Groundwater Monitoring Results – December 2010

Parameter	Units	BH-1	BH-3	IGV
BOD	mg/l	13	5	-
TSS	mg/l	5832	1428	-
Dissolved Oxygen	%	74	78	NAC
Oils, Fats & Greases	mg/l	<1	1.6	-
Total Phosphorus	mg/l	16	7	-
Ammoniacal Nitrogen	mg/l	22.9	11.6	0.12
Conductivity	mS/cm	0.592	0.524	1.000
DRO	mg/l	<0.01	<0.01	0.01
Aliphatic Hydrocarbons	mg/l	<0.01	<0.01	-
Undecane	mg/l	<0.01	<0.01	-

### 3.4 Noise Monitoring

The annual noise survey was conducted in September 2010 and submitted to the Agency in December in accordance with Schedule C of the licence. The monitoring locations include three boundary locations (N1 – N3) and two off site noise sensitive locations (NS1 and NS2). The survey was conducted when the site was fully operational and confirmed that noise emissions fully complied with the licence and that the facility is not impacting negatively on the nearest sensitive receptors. A summary of the noise results is shown on Table 3.8.

**Table 3.8** Noise Monitoring Results 2010

Station	Time	LAeq 30 min dB	LAF10 30 min dB	LAF90 30 min dB	Noise audible
N1	10.10- 10.40	68	73	57	The primary source of noise was on-site traffic movements and site plant operating nearby.
N2	08.56- 09.26	66	69	58	The primary source of noise was on-site traffic movements. For a 15 minute period a truck was left idling close to the monitoring location.
N3	09.36- 10.06	56	57	53	The primary source of noise was on-site plant noise with site traffic movements also.
NS1	11.28- 11.55	60	64	51	Noise from the GES facility was inaudible. The dominant noise source was traffic noise from Ballybeg Drive and construction work taking place close to the monitoring location.
NS2	11.46- 11.16	65	69	48	Noise from the GES facility was inaudible. The dominant noise source was traffic noise from Kilbarry Road.

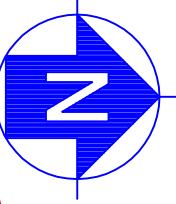
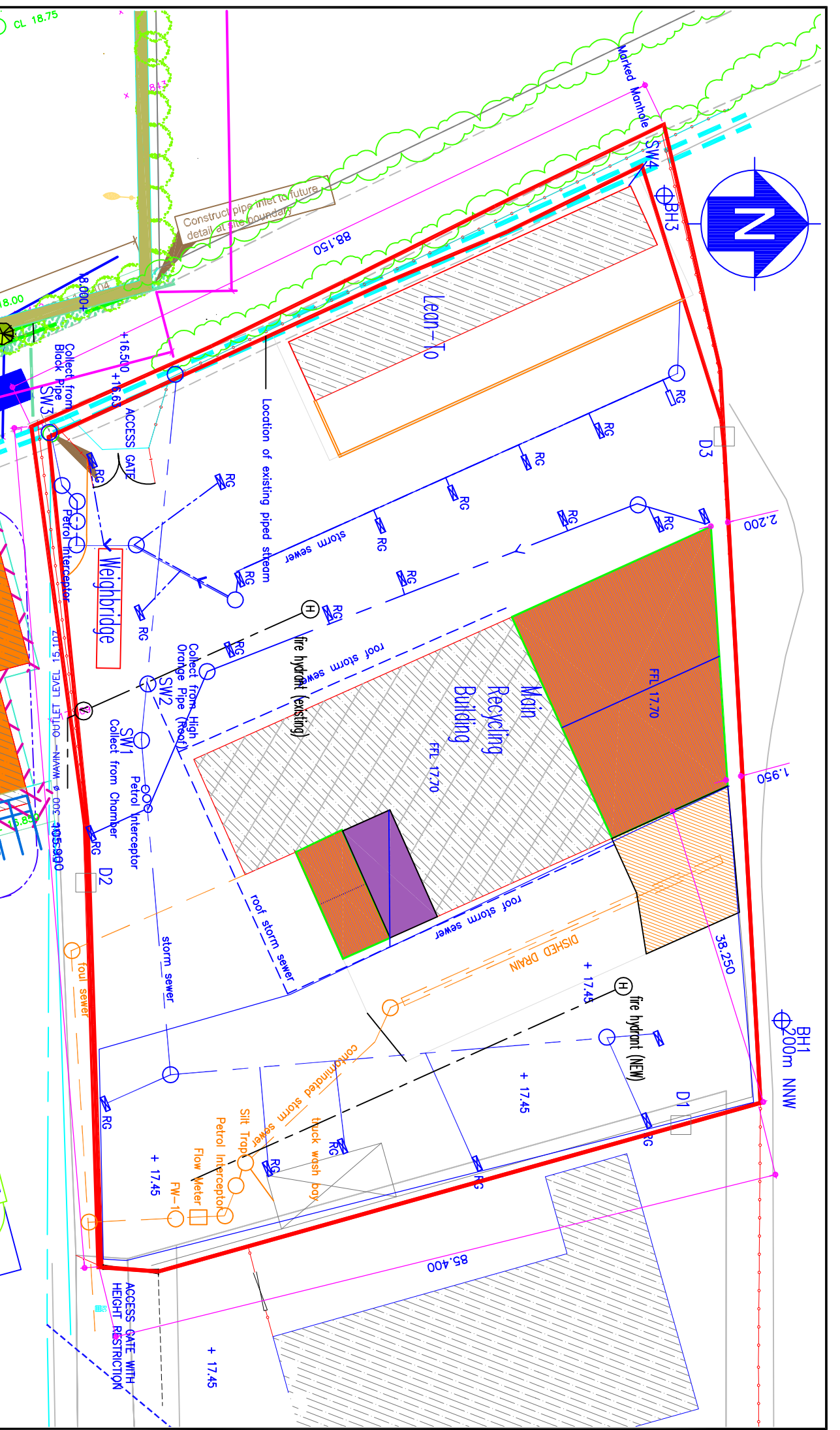
### 3.5 Dust Monitoring

Dust monitoring was carried out on three occasions at three on-site locations (D1, D2 and D3) in July, October and November 2010 in accordance with Schedule C of the Licence. The results of the monitoring are included on Table 3.9.

The dust emission limit (350 mg/m<sup>2</sup>/day) was not exceeded during the monitoring period and the facility was 100% compliant with the licence.

**Table 3.9** Dust Monitoring Results 2010

Dust Emission (mg/m <sup>2</sup> /day)	July	October	November	Emission Limit
Sample Location	32 Days	30 Days	30 Days	(mg/m <sup>2</sup> /day)
<b>D1</b>	211.1	256.8	40.6	350
<b>D2</b>	341.2	147.3	66.7	350
<b>D3</b>	161.7	267.3	105.5	350



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CLIENT	Greenstar Environmental Services
TITLE	Monitoring Locations – Waterford

details

FIGURE No.	3.1
SCALE	NTS
REV.	A

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## 4. SITE DEVELOPMENT WORKS

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### 4.1 Engineering Works

Infrastructural works carried out include the installation of a new waste water flow meter and mains water supply meter in March 2010. The permanent repair of a damaged security fence in the rear yard area was also carried out in March 2010. In July 2010 an internal loading ramp was constructed inside the general waste building, permitting loading of baled recyclables internally and faster loading of general wastes.

In 2011 it is planned to carry out minor yard surface repairs.

### 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 in 2010**

<b>Resources</b>	<b>Quantities</b>
Diesel (green)	41,614 litres
Electricity	343,950 Units
Hydraulic Oil	391 litres
AdBlu Diesel Additive	1,200 litres
Mains Water	338,000 litres
Odour Neutraliser	50 litres

### 4.3 Bund Integrity Testing

Condition 3.11.5 of the licence requires that tank and bund testing be carried out at least once every three years. Integrity testing will be carried out in 2011 and reported in the AER for 2011.

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## **5. WASTE RECEIVED AND CONSIGNED FROM THE FACILITY**

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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. Table 5.3 shows the quantities of waste received and consigned in previous years. 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 49,011.00 tonnes. The total waste consigned was 48,120.34 tonnes. Approximately 478 tonnes of waste remained on site at the end of 2010 which will be consigned in 2011. The remaining difference in tonnage (less than 1%) is likely due to the weigh of rainfall present in skips accepted at the facility which are unloaded internally and/or the acceptance of wet green waste which dried out while awaiting consignment.

The recovery rate for the facility is estimated at 53.42 %. All the wastes consigned from the site went to recovery and disposal facilities agreed with the Agency.



**Table 5.1 Waste Received & Consigned 2010**

<b>EWC</b>	<b>Description</b>	<b>Waste In</b>	<b>Waste Out</b>
10 01 01	Bottom Ash (Wood)	440.99	326.40
10 10 08	Casting cores containing gypsum from non-ferrous metallurgy	1,411.15	1,437.01
15 01 01	Cardboard Packaging	4,412.90	7,815.65
15 01 02	Plastic Packaging	273.82	481.21
15 01 03	Wooden Packaging	1,022.15	1,482.50
15 01 04	Metallic Packaging	49.04	44.76
15 01 06	Mixed Packaging	6,012.17	244.62
15 01 07	Glass Packaging	1,567.98	1,558.89
16 01 03	Tyres		2.04
16 02 14	WEEE	4.08	
17 01 07	C&D	1,700.51	3,896.98
17 02 01	Timber from C&D	106.09	
17 05 04	Soil & Stones	295.76	55.38
17 08 02	Plasterboard	2.08	
20 03 03	City Council blocked surface water drain, silt & litter	7.56	
20 01 01	Newspaper & Pamphlets	13.08	
20 01 01	Paper	1,489.76	596.48
20 01 08	Commercial Brown Bin	152.16	9.16
20 01 08	Household Brown Bin	3,150.79	3,155.13
20 01 25	Commercial Canteen Waste	0.34	
20 01 36	WEEE		1.76
20 01 38	Wood	9.49	
20 01 39	Plastic (PP & PVC)	1,288.66	
20 01 40	Metal	188.5	365.77
20 02 01	Green Waste	646.24	560.42
20 03 01	Mixed Municipal Waste	16,384.68	22,087.78
20 03 01	Mixed Dry Recyclables	1,140.88	1,575.79
20 03 07	Skip Waste C&I	7,240.14	2,462.61
	<b>Total Received</b>	<b>49,011.00</b>	
	<b>Total Consigned</b>		<b>48,120.34</b>
	<b>Total Recovered</b>		<b>25,706.16</b>
	<b>Total Disposed</b>		<b>22,414.18</b>
	<b>Recovery Rate</b>		<b>53.42%</b>

**Table 5.2 Waste Received & Consigned 2009**

<b>EWC</b>	<b>Description</b>	<b>Waste In</b>	<b>Waste Out</b>
10 01 01	Bottom Ash (Wood)	485	391
15 01 01	Cardboard	3463	7983
15 01 02	Plastic	302	581
15 01 04	Aluminium	4	-
15 01 06	Mixed Packaging	5991	-
17 01 07	C&D	1594	3091
20 01 01	Paper	1501	299
20 01 02	Glass	1724	1707
20 01 08	Biodegradable Waste	3509	3274
20 01 36	WEEE	1	6
20 01 38	Wood	946	1324
20 01 39	Plastic (PP & PVC)	988	1019
20 01 40	Metal	190	297
20 02 01	Green Waste	159	129
20 03 01	Mixed Municipal Waste	27070	26291
20 03 01	Mixed Dry Recyclables	633	1182
	<b>Total Received</b>	<b>48,560</b>	
	<b>Total Consigned</b>		<b>47,574</b>
	<b>Total Recovered</b>		<b>20,892</b>
	<b>Total Disposed</b>		<b>26,682</b>
	<b>Recovery Rate</b>		<b>43.92%</b>

**Table 5.3 Waste Received & Consigned**

	<b>2009</b>	<b>2008</b>
<b>Total Received</b>	48,560	52,055
<b>Total Consigned</b>	47,574	52,212
<b>Total Recovered</b>	20,892	20,113
<b>Total Disposed</b>	26,682	32,099
<b>Recovery Rate</b>	43.92%	38.52%

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## **6. ENVIRONMENTAL INCIDENTS AND COMPLAINTS**

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### **6.1 Incidents**

The routine monitoring programme identified one incident during the reporting period. The Q3 2010 foul water sample marginally exceeded the ELV set for surfactants. The truckwash dosing unit concentration was reduced which resulted in an improved discharge in Q4 2010.

There was another incident during the reporting period which related to a fire at the facility. On the 16<sup>th</sup> March 2010, there was a break-in at the facility during which, two vehicles and a stockpile of green waste were set on fire. The Emergency Response Plan was activated and the fire brigade were called to the site and quickly extinguished the fire. The surface water shut off valve was activated and the retained firewater was tested and diverted to the foul sewer system with the permission of the Sanitary Authority. The incident was reported to the Agency on the 16<sup>th</sup> March 2010.

### **6.2 Register of Complaints**

GES maintains a register of complaints received in accordance with Condition 10.4 of the waste licence. There were no complaints received during the reporting period.

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## 7. ENVIRONMENTAL DEVELOPMENT & CONTROL

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### 7.1 Environmental Management Programme Report

GES has developed an Environmental Management System (EMS) for the facility. In 2011 the facility will strive to gain ISO 14001 & OHSAS 18001 certification. In achieving this, the facility will operate under an Integrated Environmental, Health & Safety Management System going forward. With the exception of the Schedule of Objectives and Targets, which are amended annually as part of the AER, and a revision of a number of the operating procedures, the environmental management programme was not amended in 2010. In 2011 the facility will receive an updated and comprehensive list of procedures suitable for licence & legal requirements in order to gain ISO & OHSAS certification which will be submitted to the Agency in the 2011 AER. The schedule of Objectives and Targets, including their status for 2010 (Table 7.1), as well as the proposed Objectives and Targets for 2011 (Table 7.2) are presented below.

#### 7.1.1 Site Management Structure

Management and Staffing structure: -

**Name:** Michael Keating

**Responsibility:** Depot Manager

**Experience:** Over 30 years experience waste management experience; has completed the FÁS waste management course.

**Name:** Tom Walsh

**Responsibility:** Operations Manager

**Experience:** Over 10 years experience waste management experience; has completed the FÁS waste management course.

**Name:** Ivan Cummins

**Responsibility:** Yard Supervisor

**Experience:** 26 years experience waste management experience.

### 7.1.2 *Staff Training*

Staff training carried out during the year included mainly safety training. Details on staff training are retained on the company's electronic Training Management System (TMS).

## 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 – Increase energy efficiency of fleet**

Six (33%) of eighteen vehicles now take AdBlu additive (improves diesel efficiency), up from 5 in 2009. NO<sub>x</sub> emission levels and energy efficiency will improve accordingly.

#### **Objective 2 – Identify opportunities for water use reduction**

Water use decreased by 1% over 2009 usage.

#### **Objective 3 – Increase efficiency of operations**

The Key Performance Indicator (KPI) monitoring the loading efficiency of dispatched MSW and Baled Recyclables continues monthly. A KPI for granulated hard plastics has been identified as 22 tonnes/load and continues to be monitored monthly.

#### **Objective 4 – Reduce recyclables losses/ maximise recyclables gains**

Dry commercial & industrial bulky waste is now dispatched (following metal & wood removal) to Millenium Park MRF, diverting 2,400 tonnes from immediate landfill (11% of MSW to landfill tonnage).

#### **Objective 5 – Improve quality of self-monitoring data**

New waste water flow and mains water supply meters installed March 2010 and calibrated at installation. Re-calibrated January 2011.

#### **Objective 6 – Legislative compliance**

GES maintains legal Compliance and receives quarterly updates through the use of their Enviro Manager software system. These updates are communicated by the Environmental Team to all relevant persons throughout the company.

### 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**

GES are committed to setting the standard in waste management and ensuring environmental compliance in all operations. In addition, GES's Environmental, Health & Safety Policy makes a specific commitment to ensure that this policy and environmental records are available to the public and interested parties.

To this end GES has drawn up a Communications Programme, which details how members of the public are facilitated in accessing and viewing environmental information at the facility. Members of the public who wish to inspect these files may do so at 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**

Greenstar has accrued over €3,000,000 in funds, to provide for any potential environmental liabilities at this facility. Greenstar also 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**

GES has contracted a vermin control company to carry out nuisance control at the facility. Prevent a Pest provide pest control at the facility and also provide for the treatment of insects at the facility if necessary. Daily litter picks and road-sweeping are carried out by yard operators during the course of their daily duties. An odour control system is in place at the facility which can be operated automatically or manually by the Environmental Officer and Operations Supervisor as needed. A site inspection is carried out daily and recorded on the facilities inspection log which is controlled as part of the current Environmental Management System.

## **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 1.

## **7.7 Wastewater Volumes**

The volume of waste water produced on site for the reporting period was 1,099 m<sup>3</sup>. A total of 16 tonnes of oil interceptor waste and sludge was transported off site in October 2010.

**Table 7.1 Objectives and Targets for 2010**

<b>No</b>	<b>Objective</b>	<b>Target</b>	<b>Responsibility</b>	<b>Timescale</b>
<b>1</b>	<b>2008 energy efficiency audit data a permanent monitoring procedure</b>	Continue annual audit and monitor KPIs for future years	EHSO/Yard Supervisor	Completed
	<b>Increase energy efficiency of fleet</b>	Expand use of AdBlu diesel additive	Operations Supervisor	Completed
<b>2</b>	<b>Identify opportunities for water use reduction</b>	Reduce water usage where opportunity identified	EHSO	Completed
<b>3</b>	<b>Increase efficiency of operations</b>	KPI: average weight of dispatch of MWM and Soft Recyclables – add specific KPI for hard plastics	Depot Manager/Ops & Yard Supervisors	Completed
<b>4</b>	<b>Reduce recyclables losses/ maximise recyclables gains</b>	KPI of Soft Recyclable process losses	Depot Manager/Ops & Yard Supervisors	Completed
		KPI of Hard Recyclable process gains improving on 2008's results		
<b>5</b>	<b>Improve quality of self-monitoring data</b>	Complete calibration of installed foul water flow meter	Contractor / EHSO	Completed
<b>6</b>	<b>Legislative Compliance</b>	Zero non-compliances	Management Team	Completed



**Table 7.2 Schedule of Objective and Targets 2011**

<b>No</b>	<b>2010 Objective</b>	<b>Target</b>	<b>Responsibility</b>	<b>Status</b>
1	<b>Awareness and Training</b>	Continue to ensure that appropriate training is carried out specific to all site personnel as per the Company's established Training Matrix.	Site Management	Q4 2011
2	<b>Energy &amp; Resource Consumption</b>	Summarise energy and resource usage on a quarterly basis with a view to reducing consumption	Site Management	Q4 2011
		Assess whether an Energy Audit should be carried out.		
3	<b>Review and Assess the Effectiveness of Nuisance Control Procedures</b>	Continually review and assess all nuisance control procedures to ensure minimal impact on the surrounding area.	Site Management	Q4 2011
4	<b>Pollution Prevention</b>	Strive to ensure that monitoring results comply with the licence limits and investigate any exceedances of emission limit values.	Site Management	Q4 2011
5	<b>EMS Accreditation</b>	Issue new EMS documentation	Management team	Q2 2011
		Achieve accreditation to ISO 14001	Management team	Q4 2011

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## **8. OTHER REPORTS**

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No other reports were specified by the Agency.

# **APPENDIX 1**

## European Pollutant Release and Transfer Register



Environmental Protection Agency

| PRTR# : W0177 | Facility Name : Greenstar Environmental Services Limited |  
 Filename : W0177\_2010.xls | Return Year : 2010 |

[Guidance to completing the PRTR workbook](#)

# AER Returns Workbook

Version 1.1.11

<b>REFERENCE YEAR</b>	2010
-----------------------	------

## 1. FACILITY IDENTIFICATION

Parent Company Name	Greenstar Environmental Services Limited
Facility Name	Greenstar Environmental Services Limited
PRTR Identification Number	W0177
Licence Number	W0177-03

### Waste or IPPC Classes of Activity

No.	class_name
3.12	Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.11	Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.13	Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.
4.13	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 produced.
4.2	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.
4.4	Recycling or reclamation of other inorganic materials.
Address 1	Carrignard
Address 2	Six Cross Roads
Address 3	Business Park
Address 4	Waterford City
Country	Ireland
Coordinates of Location	-7.14684 52.2345
River Basin District	IESE
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
<b>AER Returns Contact Name</b>	Garrett Walsh
<b>AER Returns Contact Email Address</b>	garrett.walsh@greenstar.ie
<b>AER Returns Contact Position</b>	Environmental Officer
<b>AER Returns Contact Telephone Number</b>	051-333922 / 051-382270
<b>AER Returns Contact Mobile Phone Number</b>	086-1705034
<b>AER Returns Contact Fax Number</b>	051-333945
<b>Production Volume</b>	0.0
<b>Production Volume Units</b>	
<b>Number of Installations</b>	0
<b>Number of Operating Hours in Year</b>	0
<b>Number of Employees</b>	0
<b>User Feedback/Comments</b>	
<b>Web Address</b>	

## 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
<b>3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)</b>	
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 ?	

4.1 RELEASES TO AIR

[Link to previous years emissions data](#)

| PRTR# : W0177 | Facility Name : Greenstar Environmental Services Limited | Filename : W0177\_2010.xls | Return Year : 2010 |

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**SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS**

POLLUTANT		RELEASERS TO AIR			Please enter all quantities in this section in KGs			
No. Annex II	Name	M/C/E	METHOD		Emission Point 1	QUANTITY		
			Method Code	Designation or Description		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 PRTR POLLUTANTS**

POLLUTANT		RELEASERS TO AIR			Please enter all quantities in this section in KGs			
No. Annex II	Name	M/C/E	METHOD		Emission Point 1	QUANTITY		
			Method Code	Designation or Description		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 C : REMAINING POLLUTANT EMISSIONS (As required in your Licence)**

POLLUTANT		RELEASERS TO AIR			Please enter all quantities in this section in KGs			
Pollutant No.	Name	M/C/E	METHOD		Emission Point 1	QUANTITY		
			Method Code	Designation or Description		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

**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 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 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# : W0177 | Facility Name : Greenstar Environmental Services Limited | Filename : W0177\_2010.xls | Return Year : 2010 |

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**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			
POLLUTANT		M/C/E	Method Used		QUANTITY			
No. Annex II	Name		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 KGs			
POLLUTANT		M/C/E	Method Used		QUANTITY			
No. Annex II	Name		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 quantities in this section in KGs			
POLLUTANT		M/C/E	Method Used		QUANTITY			
Pollutant No.	Name		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# : W0177 | Facility Name : Greenstar Environmental Services Limited | Filename : W0177\_201

31/03/2011 16:51

**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 Used		Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
			Method Code	Designation or Description				
					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 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 Used		Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
			Method Code	Designation or Description				
					FW-1			
303	BOD	C	PER	Calculated using flow to sewer over the year. Analysis is ISO accredited	55.3896	55.3896	0.0	0.0
306	COD	C	PER	Calculated using flow to sewer over the year. Analysis is ISO accredited	116.494	116.494	0.0	0.0
240	Suspended Solids	C	PER	Calculated using flow to sewer over the year. Analysis is ISO accredited	114.6623	114.6623	0.0	0.0
314	Fats, Oils and Greases	C	PER	Calculated using flow to sewer over the year. Analysis is ISO accredited	7.1435	7.1435	0.0	0.0
308	Detergents (as MBAS)	C	PER	Calculated using flow to sewer over the year. Analysis is ISO accredited	0.393442	0.393442	0.0	0.0

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



4.4 RELEASES TO LAND

[Link to previous years emissions data](#)

| PRTR# : W0177 | Facility Name : Greenstar Environmental Services Limited | Filename : W0177\_2010.xls | Return Year : 2010 |

31/03/2011 16:51

SECTION A : PRTR POLLUTANTS

POLLUTANT		RELEASERS TO LAND			Please enter all quantities in this section in KGs		
POLLUTANT		METHOD			QUANTITY		
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)

POLLUTANT		RELEASERS TO LAND			Please enter all quantities in this section in KGs		
POLLUTANT		METHOD			QUANTITY		
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# : W0177 | Facility Name : Greenstar Environmental Services Limited | Filename : W0177\_2010.xls | Return Year : 2010 |

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Please enter all quantities on this sheet in Tonnes

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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 : Address of Next Destination Facility	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		Haz Waste : Name and Licence/Permit No of Recoverer/Disposer	Non Haz Waste: Address of Recoverer/Disposer		
Within the Country	10 01 01	No	326.4	bottom ash, slag and boiler dust (excluding boiler dust mentioned in 10 01 04) casting cores and moulds which have undergone pouring, other than those mentioned in 10 10 07	D5	M	Weighed	Offsite in Ireland	Murphy Environmental,W0129-02	Hollywood Great,Nags Head,The Naul,Co. Dublin,Ireland		
Within the Country	10 10 08	No	1437.01	mentioned in 10 10 07	R5	M	Weighed	Offsite in Ireland	Lagan Cement Ltd.,P0487-05	Killaskillen,Kinnegad,Co. Meath,,Ireland		
To Other Countries	15 01 01	No	385.35	paper and cardboard packaging	R3	M	Weighed	Abroad	...	.....,Netherlands		
To Other Countries	15 01 01	No	109.6	paper and cardboard packaging	R3	M	Weighed	Abroad	...	.....,France		
To Other Countries	15 01 01	No	295.68	paper and cardboard packaging	R3	M	Weighed	Abroad	...	.....,United Kingdom		
To Other Countries	15 01 01	No	422.49	paper and cardboard packaging	R3	M	Weighed	Abroad	...	.....,Indonesia		
To Other Countries	15 01 01	No	6329.05	paper and cardboard packaging	R3	M	Weighed	Abroad	...	.....,China		
Within the Country	15 01 01	No	273.48	paper and cardboard packaging	R13	M	Weighed	Offsite in Ireland	Bailey Waste Recycling,WFP-FG-08-0002-01	Road,Blanchardstown,Dublin 11,Ireland		
To Other Countries	15 01 02	No	66.46	plastic packaging	R3	M	Weighed	Abroad	...	.....,United Kingdom		
To Other Countries	15 01 02	No	359.93	plastic packaging	R3	M	Weighed	Abroad	...	.....,China		
Within the Country	15 01 02	No	36.82	plastic packaging	R3	M	Weighed	Offsite in Ireland	Asian Eagle Ltd.,CK(S) 552/08	Courtstown Industrial Estate, Little Island, Co. Cork,,Ireland		
Within the Country	15 01 02	No	18.0	plastic packaging	R3	M	Weighed	Offsite in Ireland	Leinster Environmentals/ Eco WM Ltd.,WFP-LH-09-0004-01	Clermont Business Park,Haggardstown,Dundalk, Co. Louth,Ireland		
Within the Country	15 01 03	No	1260.8	wooden packaging	R3	M	Weighed	Offsite in Ireland	Eirebloc,CK(S) 503/07	Lissarda,Co. Cork,,Ireland		
Within the Country	15 01 03	No	46.22	wooden packaging	R3	M	Weighed	Offsite in Ireland	OD Recycling,WFP-TS-10-0002-01	Kilshelkin,Co. Tipperary,,Ireland		
Within the Country	15 01 03	No	175.48	wooden packaging	R3	M	Weighed	Offsite in Ireland	Ormonde Environmental,Not Required	Portlaw,Co. Waterford,,Ireland		
Within the Country	15 01 04	No	33.44	metallic packaging	R4	M	Weighed	Offsite in Ireland	MSM at Greenstar Ltd.,W0079-01	Unit 41 Cookstown Industrial Estate,Tallaght,Dublin 24,,Ireland		
Within the Country	15 01 04	No	5.98	metallic packaging	R4	M	Weighed	Offsite in Ireland	One51 Cork Metal Company,CK(S) 491-07	Dublin Hill,Cork,,Ireland		
Within the Country	15 01 04	No	5.34	metallic packaging	R4	M	Weighed	Offsite in Ireland	Killarney Waste Disposal ,W0217-01	Aughacurreen,Killarney ,Co. Kerry,,Ireland		
Within the Country	15 01 06	No	244.62	mixed packaging	R13	M	Weighed	Offsite in Ireland	Mr. Binman Clearpoint Ltd.,WP035-02	Ballylynch,Carrick-On-Suir,Co. Tipperary,,Ireland		
Within the Country	15 01 07	No	1026.97	glass packaging	R5	M	Weighed	Offsite in Ireland	Glassco,WP 247/2006	Park,Naas,Co. Kildare,,Ireland		
Within the Country	15 01 07	No	10.56	glass packaging	R5	M	Weighed	Offsite in Ireland	Tullagower Quarries,004/08/WPT/CL	Kilrush,Co. Clare,,Ireland		
To Other Countries	15 01 07	No	521.36	glass packaging	R5	M	Weighed	Abroad	Glassdon,LN 06/08	52 Creagh Road,Toomebridge,Co. Antrim,BT41 3SE,United Kingdom		
Within the Country	16 01 03	No	2.04	end-of-life tyres mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	R5	M	Weighed	Offsite in Ireland	Crumb Rubber,WP 2007/01	Mooretown,Drumskin,Dundalk,Co. Louth,Ireland		
Within the Country	17 01 07	No	2749.39	mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	R5	M	Weighed	Offsite in Ireland	P Babington,WFT-TS-10-0004-01	Lower Ballylynch,Carrick-On-Suir,Co. Tipperary,,Ireland		
Within the Country	17 01 07	No	1147.59	01 06	R5	M	Weighed	Offsite in Ireland	Adam Greene,WP 69/08	Killowen Orchard,Portlaw,Co. Waterford,,Ireland		

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 : Address of Next Destination Facility	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		Non	Non Haz Waste: Address of Recoverer/Disposer		
Within the Country	17 05 04	No	55.38	soil and stones other than those mentioned in 17 05 03	R5	M	Weighed	Offsite in Ireland	Adam Greene,WP 69/08	Killowen Orchard,Portlaw,Co. Waterford,,Ireland		
Within the Country	20 01 01	No	527.92	paper and cardboard	R13	M	Weighed	Offsite in Ireland	Bailey Waste Recycling,WFP-	Road,Blanchardstown,Dublin		
To Other Countries	20 01 01	No	20.08	paper and cardboard	R3	M	Weighed	Abroad	FG-08-0002-01	11, Ireland		
To Other Countries	20 01 01	No	48.48	paper and cardboard	R3	M	Weighed	Abroad	...	.....,United Kingdom		
Within the Country	20 01 08	No	899.7	biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	Waddock Composting,WP-02-08	Killamaster,Tullow,Co. Carlow,,Ireland		
Within the Country	20 01 08	No	769.56	biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	Miltown Composting Systems,W0270-01	Miltownmore,Fethard,Co. Tipperary,,Ireland		
Within the Country	20 01 08	No	9.16	biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	Munster Proteins,P0044-02	Christendom,Ferrybank,Co. Waterford,,Ireland		
Within the Country	20 01 08	No	1445.87	biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	Acorn Recycling,W0249-01	Littleton,Ballybeg,Co. Tipperary,,Ireland		
Within the Country	20 01 36	No	1.76	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	R4	M	Weighed	Offsite in Ireland	KMK Metals (WEEE Ireland),W0113-03	Cappincur Industrial Estate,Daingean Road,Tullamore,Co. Offaly,Ireland		
Within the Country	20 01 40	No	358.41	metals	R4	M	Weighed	Offsite in Ireland	MSM at Greenstar Ltd.,W0079-01	Unit 41 Cookstown Industrial Estate,Tallaght,Dublin 24,,Ireland		
Within the Country	20 01 40	No	7.36	metals	R4	M	Weighed	Offsite in Ireland	Molloy Metals,WP08/14b OD Recycling,WFP-TS-10-0002-01	Ballycarney,Enniscorthy,Co. Wexford,,Ireland		
Within the Country	20 02 01	No	516.22	biodegradable waste	R3	M	Weighed	Offsite in Ireland	Cremins Farm Compost,WFP-LK-2009-23A-R1	Kilsheelin,Co. Tipperary,,Ireland		
Within the Country	20 02 01	No	44.2	biodegradable waste	R3	M	Weighed	Offsite in Ireland		Broadford,Co. Limerick,,Ireland		
Within the Country	20 03 01	No	13586.69	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd.,W0165-02	Ballynagran Landfill,Coolbeg & Kilcandra,Co. Wicklow,,Ireland		
Within the Country	20 03 01	No	8272.91	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Wexford County Council,W0191-01	Holmestown Landfill,Bartown,Co. Wexford,,Ireland		
Within the Country	20 03 01	No	139.22	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Cork County Council,W0068-02	Landfill,Mudflats, Youghal ,Co. Cork,Ireland		
Within the Country	20 03 01	No	44.68	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Bord Na Mona,W0201-01	Drehid Landfill,Drehid ,Naas,Co. Kildare,Ireland		
Within the Country	20 03 01	No	44.28	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd.,W0146-01	Knockharley Landfill,Kentstown,Co. Meath,,Ireland		
<b>Within the Country</b>	<b>20 03 01</b>	<b>No</b>	159.35	mixed dry recyclables	R5	M	Weighed	Offsite in Ireland	Waterford County Council,W0189-01	Shandon,Dungarvan,Co. Waterford,,Ireland		
Within the Country	20 03 01	No	1416.44	mixed dry recyclables	R5	M	Weighed	Offsite in Ireland	Killarney Waste Disposal ,W0217-01	Aughacurreen,Killarney ,Co. Kerry,,Ireland		
Within the Country	20 03 01	No	2462.61	mixed dry recyclables	R13	M	Weighed	Offsite in Ireland	Greenstar Limited,W0183-01	Millennium Business Park,Grange,Ballycoolin,Dubl in 11,Ireland		

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