



**ANNUAL ENVIRONMENTAL REPORT**  
**GREENSTAR HOLDINGS LIMITED**  
**MATERIALS RECOVERY FACILITY**  
**MILLENNIUM BUSINESS PARK**  
**LICENCE NO. W0183-01**  
**JANUARY 2012 – DECEMBER 2012**

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**28<sup>th</sup> March 2013**

Project	Annual Environmental Report 2012			
Client	Greenstar Ltd. W0183-01			
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# 1. INTRODUCTION

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This is the 2012 Annual Environmental Report (AER) for the Greenstar Holdings Limited (Greenstar), Materials Recovery & Transfer facility (MRF) at Millennium Business Park, Ballycoolin, Dublin. It covers the period from the 1<sup>st</sup> January 2012 to the 31<sup>st</sup> December 2012.

The content is based on Schedule B of the Waste Licence (Reg. No. W0183-01) 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>. Account is also taken of the AER Draft Guidance Document and AER Information Templates issued by the Agency in January 2013<sup>2</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 EPA (Environmental Protection Agency) 1999 Waste Licensing – Draft Guidance on Environmental Management Systems and Reporting to the Agency

<sup>2</sup> EPA (Environmental Protection Agency) 2012 Draft AER Guidance Document  
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## 2. SITE DESCRIPTION

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### 2.1 Site Location and Layout

The facility occupies 4.45 hectares (ha) in the east of the Millennium Business Park, Ballycoolin, Dublin 11. It is intended to develop the facility in a number of Phases. Phases 1 and 2 opened in July 2006 and involved the construction of the Materials Recovery Facility (MRF) building and supporting ancillaries. The licence allows for the construction of a biowaste treatment building but this has not yet been constructed.

### 2.2 Waste Management Activities

The facility is currently licensed to accept and process 220,000 tonnes of waste per annum, comprising commercial/industrial non-hazardous waste, municipal waste and construction and demolition wastes. All waste processing takes place inside the waste transfer building, as specified in Condition 4.1 of the Licence. The Agency has granted approval for the outdoor storage of wrapped bales of SRF.

#### 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

- Municipal Waste (100,000 tonnes),
- Commercial & Industrial (90,000 tonnes),
- Construction & Demolition (30,000 tonnes).

No hazardous wastes or liquid waste are accepted at the facility.

Key processes carried out include: -

- Baling and Compaction of Municipal and Commercial & Industrial (C&I) waste,
- Separation of C&I waste into different waste streams (paper, cardboard, glass, metal, organic),
- Screening of C&D waste into different waste streams (metals, concrete, bricks, tiles, plaster board, timber etc),

- Production of Solid Recovered Fuel (SRF) and baling and outdoor storage pending shipment.

### *C&I Waste*

C&I waste is off loaded in dedicated bays inside the MRF building. Pre-segregated wastes are off loaded in separate bays from the mixed waste. On the tipping floor the waste is inspected for unsuitable materials, which are immediately removed to the waste quarantine area.

The pre-segregated material is then moved to storage bays from where it is loaded onto trailers for removal off-site. The mixed waste is initially sorted using a mechanical grab to remove large items such as timber and metal. Such items are removed to the appropriate storage/handling areas inside the building. The remaining waste is separated using the automated processing equipment (which includes some manual picking) into the different waste streams (paper, cardboard, plastic, wood, metal, fines and stone). The recovered materials are sent to authorised facilities for further recycling and the residual waste to landfill or sent to the onsite bailing process for the production of SRF bales. SRF bales are stored externally pending shipment abroad for energy recovery.

### *Construction & Demolition Waste*

C&D waste is off loaded inside the MRF building. Pre-segregated wastes are off loaded in separate bays from the mixed waste. On the tipping floor the waste is inspected for unsuitable materials, which are immediately removed to the waste quarantine area.

The pre-segregated material is then moved to storage bays from where it is loaded onto trailers for removal off-site. The mixed waste is initially sorted using a mechanical grab to remove large items such as timber and metal. Such items are removed to the appropriate storage/handling areas inside the building. The remaining waste is separated using the automated processing equipment (which includes some manual picking) into the different waste streams (paper, cardboard, plastic, wood, metal, fines and stone).

### *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** On-Site Machinery

<b>No.</b>	<b>Plant</b>	<b>Model</b>	<b>Operational Capacity tpd</b>	<b>Standby Capacity tpd</b>
1	Synmet C&D process line	Synmet	1200	750
1	Synmet C&I process line	Synmet	1200	750
1	SRF process line	MCDI	240	0
1	C&I Loading grab	Fuchs MHL 340	2160	1710
1	Palfinger static crane	Pal. epsolution	1t@12m/3t@5m	1t
1	C&D Loading shovel	Volvo L120E	8640	7440
1	Output area Loading shovel	Volvo L150F	3024	2124
1	Output area Loading grab	Liebherr 924	972	672
1	Compactor bin ro/ro shunter		216	88
1	RDF/SRF Baler		1200	750

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### 3. EMISSION MONITORING

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The monitoring required for Phases 1 and 2 includes surface water, wastewater, dust and noise monitoring. The monitoring locations are shown on Figure 3.1. As per 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

Surface water monitoring is carried out quarterly at two monitoring points (SW-1 and SW-2) as shown on Figure 3.1. The surface water drainage system serves most of the paved area of the site and roofed areas.

During the monitoring period there was no flow in SW-2 during Q-1 2012. The sampling and analysis was carried out in accordance with recognised quality assurance and control procedures.

Trigger levels were not exceeded and the discharge was in compliance with the licence conditions. The results are included on Tables 3.1 and 3.2.

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

Parameter	Units	Q1 '12	Q2 '12	Q3'12	Q4 '12	Trigger Levels
pH	pH Units	7.76	7.83	8.29	8.32	N/A
Conductivity	mS/cm	0.342	0.299	0.401	471	N/A
Temperature	°C	9.1	10.1	10.2	7.6	N/A
Ammoniacal Nitrogen	mg/l	0.71	0.59	0.89	0.96	N/A
BOD	mg/l	18	2	11	2	25
COD	mg/l	265	14	38	12	N/A
Total Suspended Solids	mg/l	<10	<10	<10	<10	35
Oils, Fats & Greases	mg/l	<0.01	<0.01	<0.01	1.18	N/A
Mineral Oils	mg/l	<0.01	<0.01	<0.01	0.28	5

NDP – No detection possible



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

Parameter	Units	Q1 '12	Q2 '12	Q3 '12	Q4 '12	Trigger Levels
pH	pH Units	Dry	7.96	8.23	8.31	N/A
Conductivity	mS/cm	Dry	0.783	0.254	466	N/A
Temperature	°C	Dry	9.7	10.3	7.9	N/A
Ammoniacal Nitrogen	mg/l	Dry	0.04	1.41	0.87	N/A
BOD	mg/l	Dry	2	2	2	25
COD	mg/l	Dry	12	15	11	N/A
Total Suspended Solids	mg/l	Dry	22	<10	<10	35
Oils, Fats & Greases	mg/l	Dry	<0.01	<0.01	1.12	N/A
Mineral Oils	mg/l	Dry	<0.01	<0.01	0.2	5

### 3.2 Wastewater Monitoring

Schedule D of the Licence requires the sampling of the wastewater discharge (recovered wastes storage bay floor wash downs and vehicle wash) to the municipal sewer. The wastewater sampling is carried out bi-monthly at location SE-1, as shown on Figure 3.1.

In the reporting period floor wash downs were not considered necessary. Vehicles are washed at the external truck wash facility on an intermittent basis as necessary. The wash water is directed to a silt trap and then to a petrol/oil interceptor before discharging to the municipal sewer.

OCM collected six waste water samples in 2012. The Agency collected samples in Q-1 and in Q-4 2012. The Emission Limit Values were not exceeded during the reporting period and the discharge was in compliance with the licence conditions. The results are shown on Table 3.3.

**Table 3.3** Wastewater Monitoring Results SE-1

Parameter	Units	Feb '12	Apr '12	Jun '12	Aug '12	Oct '12	Dec' 12	Q-1 Agency Results	Q-4 Agency Results	Emission Limit
pH	pH Units	7.68	7.45	7.9	8.02	7.12	7.97	7.5	10	6 – 10
Electrical Conductivity	mS/cm	-	-	-	-	-	-	-	0.932	-
Temperature	°C	8.2	9.3	10.6	10.3	8.8	7.6	-	-	42
Total Nitrogen	mg/l	-	-	-	-	-	-	6.8	84.3	-
Ammoniacal Nitrogen	mg/l	1.35	8.01	2.59	0.44	12.7	10.43	-	-	100
BOD	mg/l	51	231	848	<1	12	287	<400	37.4	6,000
COD	mg/l	112	445	1,280	8	55	526	895	56.8	12,000
Total Suspended Solids	mg/l	18	54	77	81	202	720	510	131	2,500
Oils, Fats & Greases	mg/l	<0.01	2.1	<0.01	<0.01	<1	0.44	-	-	100
Phosphorus	mg/l	-	-	-	-	-	-	-	2.823	-
Orthophosphate	mg/l	<0.06	0.31	0.12	<0.06	<2	<0.06	61	-	100
Surfactants	mg/l	1.5	1.3	7.7	0.3	0.06	1.6	-	-	100
Sulphate	mg/l	92.65	105.32	88.23	483.8	562.4	<0.05	169.7	130	1,000

### 3.3 Noise Monitoring

The annual noise survey was carried out in May 2012. The full monitoring report was submitted to the Agency on the 9<sup>th</sup> July 2012. The monitoring locations included those specified in the Licence (N-1, N-2 and N-3) and one off-site noise sensitive location NSL-1 shown on Figures 3.1 and 3.2. The survey was conducted when the site was fully operational and confirmed that noise emissions complied with the Licence conditions and that the facility is not impacting negatively on the nearest sensitive receptors. A summary of the noise results is shown on Table 3.4.

The  $L_{Aeq\ 30\ min}$  level recorded at the offsite station NSL1 was 68 dB, due chiefly to local road traffic which was almost continuous and dominant. No emissions from the Greenstar facility were audible at this location. Therefore noise emissions from the facility were less than the 55 dB limit set in the Licence at NSL1.

**Table 3.4** Noise Monitoring Results 2012

Station	Time	L <sub>Aeq 30</sub> min dB	L <sub>AF10 30</sub> min dB	L <sub>AF90 30</sub> min dB	Specific level* dB	Noise audible
N1	1453-1523	45	46	41	45	Greenstar emissions continuously audible and dominant, chiefly from facade vents. Significant screening provided by intervening earth mound and stored waste bales. Distant traffic audible. Bird song/calls and aircraft.
N2	1426-1456	64	65	59	64	Greenstar emissions continuously dominant, from facade vents, from inbuilding waste processing operations, and from truck movements on local yards and through weighbridge. No other emissions audible apart from local bird calls.
N3	1414-1444	71	72	69	71	Greenstar emissions continuously dominant, from facade vents. No other noise audible apart from occasional local truck movements onsite, and from occasional bangs (from truck tailgates or similar) offsite at adjacent premises.
NSL1	1539-1609	68	72	49	<49	No facility emissions audible. Passing traffic almost continuously dominant. During lulls, distant traffic and bird calls audible.

\*Specific level: Sound pressure level contribution considered attributable to facility, determined using real time assessment, field notes, time history profiles, statistical analysis, frequency spectra, near field correction if applicable, and other parameters.

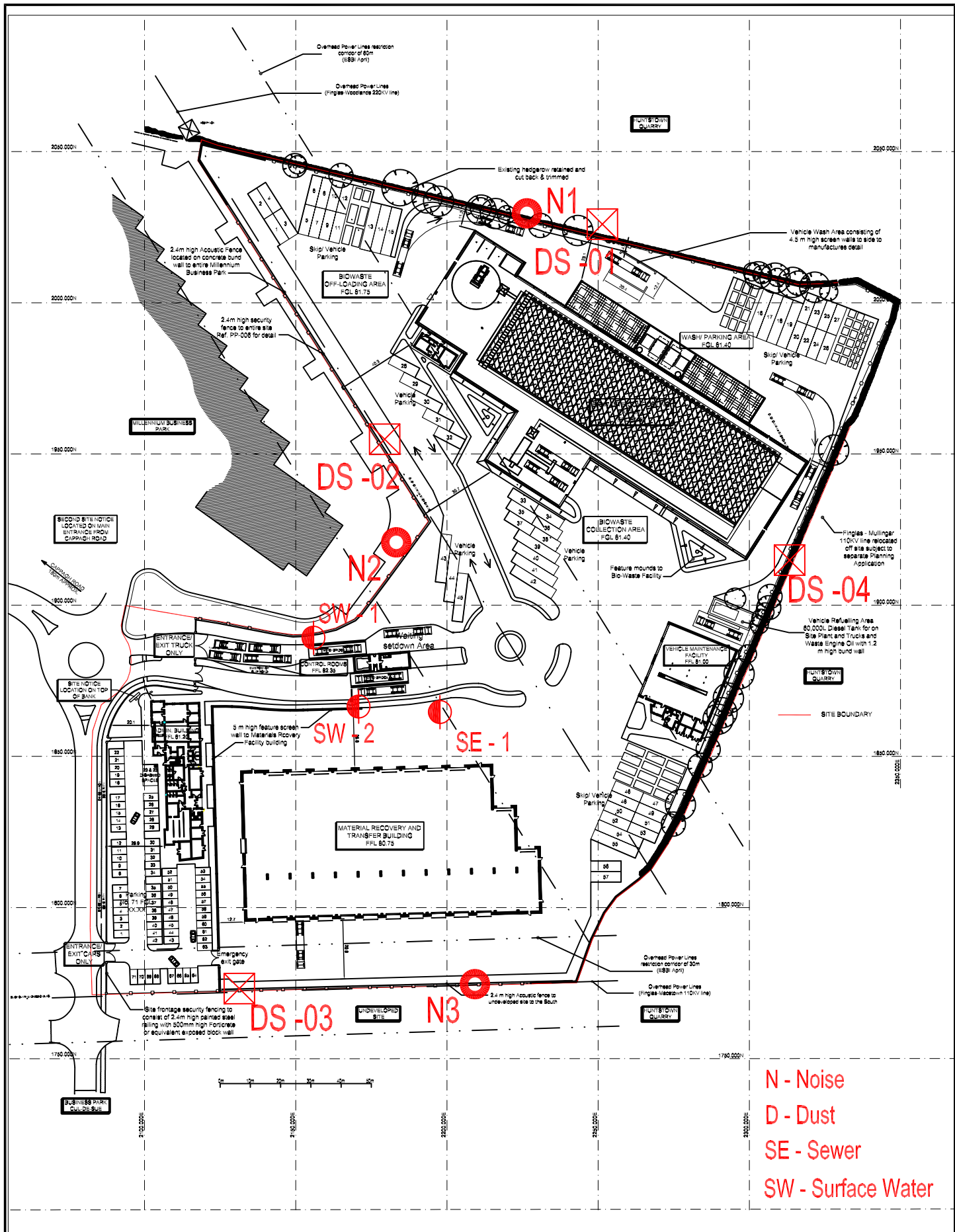
### 3.4 Dust Monitoring

Dust monitoring was carried out on three occasions at four on-site locations (DS-01, DS-02, DS-03 and DS-04) in June, August – September and December 2012. The Licence requires two of these monitoring events be carried out between May and September. The results of the monitoring are included on Table 3.5.

In 2012 there were no exceedances of the dust deposition limit at any of the monitoring locations. The dust monitoring programme has shown that the facility is not a significant source of dust.

**Table 3.4** Dust Monitoring Results

Monitoring Location	Units	June '12	Aug/Sep '12	November '12	Deposition Limit Value
DS-01	mg/m <sup>2</sup> /day	30.4	118.5	21.4	350
DS-02	mg/m <sup>2</sup> /day	67.3	125.9	32.8	350
DS-03	mg/m <sup>2</sup> /day	97.3	100.9	78.7	350
DS-04	mg/m <sup>2</sup> /day	10.5	42.1	49.6	350



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CLIENT  
 GREENSTAR LTD.

DETAILS

DRG. No.

3.1

TITLE  
 MONITORING LOCATIONS  
 MILLENNIUM BUSINESS PARK

SCALE REV.

NTS A

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**Figure 3.2 Noise Sensitive Location**



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## 4. SITE DEVELOPMENT WORKS

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### 4.1 Specified Engineering Works

Approximately 2,500m<sup>2</sup> of the northern section of the site was concreted in 2012. This area is used for RDF/SRF bale storage.

Greenstar is currently assessing the feasibility of installing a portable baler and wrapping line that will be used to produce bales of municipal-type waste for export.

### 4.2 Summary of Resource & Energy Consumption

Table 4.1 presents an estimate of the resources used on-site during 2012 as well as 2011 for the purpose of drawing comparison.

**Table 4.1** Estimates of Resources Used On-Site 2011 - 2012

Resources	Quantities 2011	Quantities 2012
Diesel (green)	82,129 litres	110,983 litres
Electricity	1,716,000 kWh	2,207,363 kWh
Hydraulic, Transmission & Engine Oil	2,000 litres	3,580 litres
Truck Wash Detergent	100 litres	100 litres
Mains Water	2,000,000 litres	3,832,500 litres*
Natural Gas	58,347 kWh	62,790 kWh

\* Mains water usage is an estimate as meter not in use.

A significant increase in the consumption of diesel, electricity and oils was observed in 2012 when compared to levels observed in 2011. These variances are largely the result of changes in operation. Further mechanisation as well as an increase in operational hours was observed on the SRF line.

### 4.3 Bund Integrity Testing

Condition 3.13.3 of the Licence requires that tank, drum, pipeline and bund testing is to be carried out every three years. Five over-ground permanent material storage bunds were tested and passed in July 2012. The drains were last tested in January 2010 and were passed fit for purpose. The drains are due to be tested again in 2013.

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

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Table 5.1 shows the quantities of wastes accepted and consigned for the reporting period. A more detailed description of the wastes received and consigned in 2012 is presented in the PRTR submission in Appendix 1.

The total quantity of waste received was 92,484.12 tonnes and the total amount consigned was 87,448.73 tonnes. For comparative purposes the amounts of waste received and consigned from 2006 to 2011 are presented in Table 5.2 and 5.3. As per Condition 5.8 of the Licence, all the wastes consigned from the site went to authorised recovery and disposal facilities. A copy of the relevant Facility Permit or Waste Licences is retained on site for Agency inspection.

The records show that more waste was received at the site than consigned from. The difference was 5,035.39 tonnes.

The remaining difference is due to waste which remained on site at the end of 2012 which will be consigned in 2013.

All the wastes consigned from the site went to recovery and disposal facilities agreed with the Agency.

**Table 5.1** Waste Received & Consigned 2012

<b>EWC</b>	<b>Description</b>	<b>Waste In</b>	<b>Waste Out</b>
06 13 99	LDF Activated Carbon	-	21.98
10 01 01	Bottom ash, slag and boiler dust	2.8	-
15 01 01	Segregated cardboard & paper packaging	6.15	-
15 01 02	Segregated plastic packaging	56.32	21.14
15 01 03	Segregated wood packaging	435.78	34.62
15 01 04	Segregated metal packaging - aluminium cans	16.85	-
16 01 03	Tyres	5.46	11.75
16 05 04	Haz Gas Cylinders		1.74
17 05 04	Soil & stone from C&D waste	676.21	-
17 09 04	Mixed C&D waste	3,814.28	-
19 09 02	Interceptor Sludge	-	6.3
19 12 07	Wood	-	2,362.75
19 12 09	Minerals from mechanical treatment (e.g. inorganic fines, sand, stones)	2,148.84	24,075.4
19 12 10	RDF Combustible	60.92	10,498.55
19 12 12	Mixed Municipal Waste	6,806.54	9,684.81
20 01 01	Paper & cardboard from municipal sources	6.26	-
20 01 08	Commercial food waste e.g. canteens, restaurants	1,143.89	1,125.86
20 01 11	Textile	50.46	-
20 01 35	WEEE	1.44	-
20 01 38	Wood waste from municipal sources (e.g. furniture)	1,308.69	3,004.37
20 01 39	Plastic from municipal sources	6.07	-
20 01 40	Metals from municipal waste e.g. light iron	508.39	2,463.03
20 01 99	Grease trap carbon	0.84	0.36
20 02 01	Biodegradable garden & park waste	189.8	-
20 03 01	Mixed residual waste (typically black bin)	26,521.49	19,635.38
20 03 03	Street-cleaning residues	10,410.84	11,127.92
20 03 07	Mixed Waste	38,305.41	3,394.75
91 00 00	Bulky waste	0.4	-
<b>Total Received</b>		<b>92,484.12</b>	<b>-</b>
<b>Total Consigned</b>			<b>87,448.73</b>
<b>Recovered</b>			<b>56,305.78</b>
<b>Disposed</b>			<b>31,143</b>
<b>Recovery Rate</b>			<b>64.3%</b>



**Table 5.2** Waste Received & Consigned 2011

<b>EWC</b>	<b>Description</b>	<b>Waste In</b>	<b>Waste Out</b>
10 01 01	Bottom ash, slag and boiler dust	4	-
10 03 05	LDF Alumina	14.00	-
13 02 08	Waste Oil	-	3.00
13 05 03	Interceptor sludge	9	-
15 01 01	Segregated cardboard & paper packaging	258.00	276
15 01 02	Segregated plastic packaging	128.00	1
15 01 03	Segregated wood packaging	614.00	41
15 01 04	Segregated metal packaging - aluminium cans	4.00	-
15 01 06	Segregated mixed packaging	5,987.00	4,889.00
15 01 07	Segregated glass packaging (	52.00	-
16 01 03	Tyres	139.00	93.00
16 05 04	Haz Gas Cylinders	-	3.00
16 06 01	Haz Lead Acid Batteries	-	1.00
17 05 04	Soil & stone from C&D waste	103.00	7,674.00
17 08 02	Gypsum-based construction material e.g. Plasterboard	17.00	-
17 09 04	Mixed C&D waste	5,284.00	-
19 12 07	Wood	-	6,267.00
19 12 09	Minerals from mechanical treatment (e.g. inorganic fines, sand, stones)	8.00	16,715.00
19 12 10	RDF Combustible	-	3,213.00
19 12 12	Mixed Municipal Waste	-	20,247.00
20 01 01	Paper & cardboard from municipal sources	9.00	-
20 01 02	Glass from municipal sources	8.00	-
20 01 08	Commercial food waste e.g. canteens, restaurant	1,116.00	6,078.00
20 01 10 / 20 01 11	Textile waste from municipal sources (e.g. clothing, curtains)	38.00	-
20 01 35	WEEE	1.00	-
20 01 38	Wood waste from municipal sources (e.g. furniture)	2,205.00	998.00
20 01 39	Plastic from municipal sources	3.00	-
20 01 40	Metals from municipal waste e.g. light iron	466	2,508.00
20 01 99	Grease trap carbon	1.00	-
20 02 01	Biodegradable garden & park waste	7,032.00	41.00
20 03 01	Mixed residual waste (typically black bin)	18,163.00	-
20 03 01	Mixed dry recyclables (typically green bin)	12,555.00	-
20 03 03	Street-cleaning residues	954.00	2,498.00
20 03 07	Bulky waste	32,019.00	11,635.00
<b>Total Received</b>		<b>87,191</b>	
<b>Total Consigned</b>			<b>83,181</b>

**Table 5.3** Waste Received & Consigned

<b>Year</b>	<b>Total Received</b>	<b>Total Consigned</b>
2011	87,191	83,181
2010	74,694.50	68,868.59
2009	79,469.57	77,224.94
2008	133,813.88	129,366.26
2007	167,056.84	161,828.21
2006	79,570.21	80,725.68

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

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### **6.1 Incidents**

There were no reportable incidents in 2012.

### **6.2 Register of Complaints**

Greenstar maintains a register of complaints received in accordance with Condition 9.4 of the waste licence. There were no complaints in 2012.

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## 7. ENVIRONMENTAL DEVELOPMENT & CONTROL

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### 7.1 Environmental Management Programme Report

Greenstar have implemented an Integrated Management System (IMS) in accordance with the requirements of Occupational Health and Safety Assessment Series (OHSAS) 18001:2007 and International Standard Organisation (ISO) 14001:2004 in order to manage the Health, Safety and Environmental performance of their business and to control health and safety risk and to minimise their environmental aspects and impacts.

The IMS has been developed for the achievement of continual improvement taking into the requirements of the Waste Licence Conditions. Greenstar has prepared and effectively implement documented procedures and instructions in accordance with the requirements of both the OHSAS 18001:2007 and ISO 14001:2004.

As part of this IMS Greenstar has developed a list of environmental, management, operating and maintenance procedures, details of which are outlined in Appendix 2.

The schedule of Objectives and Targets, including their status for 2012 (Table 7.1), as well as the proposed Objectives and Targets for 2013 (Table 7.2) are presented below.

#### 7.1.1 Site Management Structure 2012

**Name:** Simon Kelly

**Responsibility:** Greenstar GDA and BPS Engineering Manager

**Experience:** 7 years experience waste management experience; has completed the FÁS waste management course.

**Name:** John Richardson

**Responsibility:** Facility Manager

**Experience:** 15 years experience; has completed the FÁS waste management course.

**Name:** Robert Hughes

**Responsibility:** Site Operations Manager

**Experience:** 15 years experience in Waste management,

### 7.1.2 *Staff Training*

Environmental Awareness Training was carried out in 2012.

## **7.2 Environmental Management Programme**

### 7.2.1 *Schedule of Objectives 2012*

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 – Awareness and Training**

Environmental Awareness Training was carried out in 2012.

#### **Objective 2 – Review & Assess the Effectiveness of Nuisance Control Procedures**

Nuisance control procedures are reviewed annually as part of ISO 14001. The inspection frequency was increased from eight to six weeks.

#### **Objective 3 – Energy Consumption**

Energy consumption is reviewed quarterly as part of ISO 14001.

#### **Objective 4 – Pollution Prevention**

No exceedance of the emission limits set in the Licence in 2012.

#### **Objective 5 – Infrastructure**

Approximately 2,500 m<sup>2</sup> of the site was concreted and is used for RDF/SRF bale storage in 2012.

### 7.2.2 *Schedule of Objectives 2013*

A schedule of targets and objectives for 2013 has been set by the management of the facility. These objectives are outlined in Table 7.2.

## **7.3 Communications Programme**

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

To this end Greenstar has drawn up a Communications Programme, which details how members of the public are facilitated in accessing environmental information at the facility.

Records available for public inspection on site include:-

- Environmental, Health & Safety Policy,
- Waste Licence,
- Licence Application and Review documentation,
- Monitoring Records,
- Complaints File,
- EPA Correspondence File.

Opening Times for Inspection of Records are from 10 am - 4 pm.

Visits to the site should be arranged in advance by ringing the Facility Manager or Supervisor at 1890 600 900.

**Table 7.1** Objectives and Targets for 2012 –

No	Objective	Target	Responsibility	Timescale
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.	Facility Manager	2013, environmental awareness training due Q3 2013
2	<b>Nuisance Controls</b>	To continually review and assess all nuisance control procedures to ensure minimal impact on the surrounding area using the number of complaints received as the measure of effectiveness.	Facility Manager	Increased inspection schedule Q2 2012
3	<b>Energy Consumption</b>	Investigate and remedy heavy electrical usage during weeknights. Differential between weeknights and weekends of around 30KW by 01-Apr-2012	Facility Manager	Incomplete, investigate during 2013.
4	<b>Pollution Prevention</b>	Strive to ensure that emissions comply with the licence limits and investigate any exceedances of emission limit values.	Facility Manager	Work is ongoing
5	<b>Infrastructure</b>	Concrete storage area for SRF Bales externally	Facility Manager	Completed Q2

**Table 7.2** Schedule of Objective and Targets 2013 -

No	Objective	Target	Responsibility	Timescale
1	<b>Perimeter fence litter free zone</b>	Zero litter along perimeter fence	Operations Supervisor	Q2 2013.
2	<b>Minimise wind blown litter on site</b>	Minimise wind blown litter on site, cleaning Zones established on site, weekly maintenance	Operations supervisor	Q2 2103.
3	<b>Cleaner site, cleaner entrance roads</b>	Weekly servicing by road sweeper of site and entrance roads within estate. Clean access roads within and off site	Site Management	Q1 2013.
4	<b>Odour Management</b>	Compile an Odour Management Plan for the facility and include it on the IMS training matrix	Site Management	Q2 2013
5	<b>Improve Waste Storage</b>	Review waste wood processing & storage practices taking account of the recent Agency Position Paper on the Management of Wood Waste	Site Management	Q1 2013
5B	<b>Improve Waste Storage</b>	An Overnight Waste Acceptance Procedure was introduced in November 2012. Ensuring this new procedure is implemented will improve Waste Storage and general housekeeping	Site Management	Q1 2013
6	<b>Environmental Liabilities</b>	Commission the completion of an ELRA in 2013	Site Management	Q-3 2013
7	<b>Pipework Integrity Testing</b>	Appoint a suitably qualified contractor to perform an integrity test of the pipe-work onsite including both storm water and foul lines	Site Management	Q1-Q2



No	Objective	Target	Responsibility	Timescale
8	<b>Maintain EMS to ISO:14001 Standard</b>	Through a series of scheduled audits or an audit programme throughout the year develop and maintain the current IS)14001 Certification Standard	Site Management	Q1-Q4

#### **7.4 Report Financial Provision**

Greenstar has adequate insurance cover for environmental liabilities to €10,000,000 for any one occurrence, which will apply to “sudden identifiable and unintended incidents”.

Greenstar proposes to complete a revised ELRA for the site in 2013 in accordance with Condition 11 of the licence.

#### **7.5 Nuisance Controls**

Greenstar has contracted a vermin control company Pestguard to carry out nuisance control at the facility. Pestguard undertake a 6 weekly review of the vermin activity on-site along with an inspection of the bait traps that are located throughout the facility. Bird control procedures were updated in 2010 to include the use of a bird kite at the facility.

#### **7.6 European Pollutant Release and Transfer Register Regulation**

The Pollution Emission Register (PER) has been replaced by the European Pollutant Release and Transfer Register Regulation (EC) No. 166/2006. A copy of the information submitted to the Agency via the web-based data reporting system is included in Appendix 1.

#### **7.7 Rainwater and Wastewater Volumes**

No rainwater was reused at the facility during the reporting period as the grey water reuse system has been de-commissioned. It is not possible to give an exact figure for the amount of wastewater produced during the reporting period. Approximately 1,000 m<sup>3</sup> of water was used by the truck wash during the year.

Wastewater discharges to the municipal sewer serving the industrial estate and ultimately to a waste water treatment plant operated by Fingal County Council.

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## **8. OTHER REPORTS**

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No other reports were requested by the Agency for inclusion in the AER in 2012.

# **APPENDIX 1**

## European Pollutant Release and Transfer Register



Environmental Protection Agency

[Guidance to completing the PRTR workbook](#)

# AER Returns Workbook

Version 1.1.15

<b>REFERENCE YEAR</b>	2012
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## 1. FACILITY IDENTIFICATION

Parent Company Name	Greenstar Limited
Facility Name	Greenstar Limited
PRTR Identification Number	W0183
Licence Number	W0183-01

Waste or IPPC Classes of Activity

No.	class_name
4.2	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).
3.11	Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.12	Repackaging 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.
4.11	Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule.
4.12	Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule.
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.
4.3	Recycling or reclamation of metals and metal compounds.
4.4	Recycling or reclamation of other inorganic materials.

Address 1	Millennium Business Park
Address 2	Grange
Address 3	Ballycoolin
Address 4	Dublin 11
	Dublin
Country	Ireland
Coordinates of Location	-6.34044 53.4084
River Basin District	IEEA
NACE Code	3832
Main Economic Activity	Recovery of sorted materials
<b>AER Returns Contact Name</b>	Malcolm Dowling
<b>AER Returns Contact Email Address</b>	malcolm.dowling@greenstar.ie
<b>AER Returns Contact Position</b>	Group Compliance Manager
<b>AER Returns Contact Telephone Number</b>	012947976
<b>AER Returns Contact Mobile Phone Number</b>	
<b>AER Returns Contact Fax Number</b>	
<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>	20
<b>User Feedback/Comments</b>	
<b>Web Address</b>	

## 2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
50.1	General
5(c)	Installations for the disposal of non-hazardous waste
50.1	General

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

Is it applicable?	No
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. WASTE IMPORTED/ACCEPTED ONTO SITE

[Guidance on waste imported/accepted onto site](#)

Do you import/accept waste onto your site for on-site treatment (either recovery or disposal activities) ?	
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This question is only applicable if you are an IPPC or Quarry site

4.1 RELEASES TO AIR

[Link to previous years emissions data](#)

| PRTR# : W0183 | Facility Name : Greenstar Limited | Filename : W0183\_2012.xls | Return Year : 2012 |

28/03/2013 14:50

**SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS**

POLLUTANT		RELEASES 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	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		RELEASES 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	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		RELEASES 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	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 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# : W0183 | Facility Name : Greenstar Limited | Filename : W0183\_2012.xls | Return Year : 2012 |

28/03/2013 14:50

**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 this only conc

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# : W0183 | Facility Name : Greenstar Limited | Filename : W0183\_2012.xls | Return Year : 201

28/03/2013 14:50

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				
238	Ammonia (as N)	M	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited	17.76	17.76	0.0	0.0
303	BOD	M	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited	857.4	857.4	0.0	0.0
306	COD	M	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited	1213.0	1213.0	0.0	0.0
308	Detergents (as MBAS)	M	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited	6.23	6.23	0.0	0.0
314	Fats, Oils and Greases	M	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited	3.81	3.81	0.0	0.0
343	Sulphate	M	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited	799.488	799.488	0.0	0.0
240	Suspended Solids	M	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited	576.0	576.0	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# : W0183 | Facility Name : Greenstar Limited | Filename : W0183\_2012.xls | Return Year : 2012 |

28/03/2013 14:50

**SECTION A : PRTR POLLUTANTS**

POLLUTANT		RELEASES TO LAND			Please enter all quantities in this section in KGs		
No. Annex II	Name	M/C/E	METHOD		QUANTITY		
			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		RELEASES TO LAND			Please enter all quantities in this section in KGs		
Pollutant No.	Name	M/C/E	METHOD		QUANTITY		
			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#: W0183 | Facility Name : Greenstar Limited | Filename : W0183\_2012.xls | Return Year : 2012 |

28/03/2013 14:50

Please enter all quantities on this sheet in Tonnes

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility	Haz Waste : 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	06 13 99	No	21.98	wastes not otherwise specified	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd Ballynagran Landfill ,W0165-02, Coolbeg ,Co. Wicklow ,-, ,ireland	Coolbeg ,Co. Wicklow ,-, ,ireland		
Within the Country	15 01 02	No	21.14	plastic packaging	R5	M	Weighed	Offsite in Ireland	Polymer Recovery Ltd,WFP-LS-09-0007-01,Polymer Recovery Ltd ,East Canal road ,Portarlinton Business Park ,Portarlinton ,ireland	Polymer Recovery Ltd ,East Canal road ,Portarlinton ,ireland	Enva Ireland Ltd, W0184-01,Clonminam IE,, Portlaoise,Co Laois,Ireland	Clonminam IE,, Portlaoise,Co Laois,Ireland
Within the Country	15 01 03	No	34.62	wooden packaging	R3	M	Weighed	Offsite in Ireland	Max Pallet Services Ltd.,Not Required	Colemanstown,Rathcoole,Co . Dublin,,Ireland		
Within the Country	16 01 03	No	11.746	end-of-life tyres	R3	M	Weighed	Offsite in Ireland	Crumb Rubber Ireland Limited,.,	Mooretown ,Dromiskin,Dundalk ,Co.Louth,Ireland		
Within the Country	16 05 04	Yes	1.74	gases in pressure containers (including halons) containing dangerous substances	R4	M	Weighed	Offsite in Ireland	BOC Gas Dublin,., Rilita Environmental Ltd ,W0192-03,Block 402 Greenogue Business Park Rathcoole Co. Dublin ,Greenogue Business Park ,Rathcoole ,Co. Dublin ,ireland	Bluebell,,Dublin 12,,Ireland	BOC Gas Dublin,,Bluebell,,Dublin 12,,Ireland	Bluebell,,Dublin 12,,Ireland
Within the Country	19 09 02	No	6.3	sludges from water clarification	D5	M	Weighed	Offsite in Ireland				
Within the Country	19 12 07	No	34.06	wood other than that mentioned in 19 12 06	R3	M	Weighed	Offsite in Ireland	Acorn Recycling,W0249-01	Littleton,Co Tipperary,Ireland	BOC Gas Dublin,,Bluebell,,Dublin 12,,Ireland	Bluebell,,Dublin 12,,Ireland
Within the Country	19 12 07	No	1613.75	wood other than that mentioned in 19 12 06	R3	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd,W0146-02	Knockharley ,Navan,Co. Meath,,Ireland	KMK Metals,,Cappincur Industrial Estate,Daingean Road,Tullamore,Co. Offaly,Ireland	Cappincur Industrial Estate,Daingean Road,Tullamore,Co. Offaly,Ireland
Within the Country	19 12 07	No	37.24	wood other than that mentioned in 19 12 06	R3	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd ,W0178-01	Connaught Regional Landfill,,Ballinasloe,Co. Galway,Ireland		
Within the Country	19 12 07	No	604.72	wood other than that mentioned in 19 12 06	R3	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd.,W0165-02	Ballynagran,Coolbeg & Kilcandra,Co. Wicklow,,Ireland		
Within the Country	19 12 07	No	18.04	wood other than that mentioned in 19 12 06	R3	M	Weighed	Offsite in Ireland	Boomerang Recycling,WCP/KK/342/06	Mill Road,Thurles,Tipperary,- ,ireland		
Within the Country	19 12 07	No	38.6	wood other than that mentioned in 19 12 06	R3	M	Weighed	Offsite in Ireland	Eirebloc,CK(S) 503/07 Waddock Composting Facility Ltd ,WFP-CW-11-05-01	Lissarda,Co. Cork,,Ireland		
Within the Country	19 12 07	No	16.34	wood other than that mentioned in 19 12 06	R3	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd,W0146-02	Tulow,Carlow,Co. Carlow,Ireland		
Within the Country	19 12 09	No	14505.84	minerals (for example sand, stones)	R3	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd,W0146-02	Knockharley ,Navan,Co. Meath,,Ireland		

Within the Country	19 12 09	No	777.56 minerals (for example sand, stones)	R3	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd ,W0178-01	Connaught Regional Landfill,..Ballinasloe,Co. Galway,Ireland
Within the Country	19 12 09	No	8792.0 minerals (for example sand, stones)	R3	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd.,W0165-02	Ballynagran,Coolbeg & Kilcandra,Co. Wicklow,..,Ireland
Within the Country	19 12 10	No	4440.84 combustible waste (refuse derived fuel)	R1	M	Weighed	Offsite in Ireland	Irish Cement,IE-GHG043-05	Irish Cement,platin ,drogheda,Ireland
Within the Country	19 12 10	No	6006.63 combustible waste (refuse derived fuel)	R1	M	Weighed	Offsite in Ireland	Lagan Cement Ltd,P0487-05 nurendale limited trading as panda waste services,W0261-01	Kinnegad,..,Co Meath,Ireland
Within the Country	19 12 10	No	51.08 combustible waste (refuse derived fuel) other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12	R13	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd.,W0165-02	cappagh road,dinglas ,dublin 11,-,ireland
Within the Country	19 12 12	No	9302.99 11 other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd.,W0165-02	Ballynagran,Coolbeg & Kilcandra,Co. Wicklow,..,Ireland
Within the Country	19 12 12	No	381.82 11	R13	M	Weighed	Offsite in Ireland	Greenstar Limited,W0053-03 O'Toole Composting,WFP-CW-10-0003-01	Fassaroe,Bray,Co. Wicklow,..,Ireland
Within the Country	20 01 08	No	1125.86 biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	Greenstar Limited,W0053-03 O'Toole Composting,WFP-CW-10-0003-01	Ballinrane, Fenagh,..,Co Carlow,Ireland
Within the Country	20 01 38	No	3004.373 wood other than that mentioned in 20 01 37	R3	M	Weighed	Offsite in Ireland	Eirebloc,CK(S) 503/07 Davis Recycling at Hammond Lane Metal Co Ltd,WFP-CK-10-0077-02	Lissarda,Co. Cork,..,Ireland
Within the Country	20 01 40	No	1121.39 metals	R4	M	Weighed	Offsite in Ireland	Multi Metals,WFP-WW-09-0014-01	Ringaskiddy,Co Cork,Ireland
Within the Country	20 01 40	No	1341.61 metals	R4	M	Weighed	Offsite in Ireland	Multi Metals,WFP-WW-09-0014-01	..,Blessington,Co Wicklow ,Ireland
Within the Country	20 01 99	No	0.36 other fractions not otherwise specified	R4	M	Weighed	Offsite in Ireland	BOC Gas Dublin,..	Bluebell,..Dublin 12,..,Ireland
Within the Country	20 03 01	No	5273.76 mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Bord na Mona.,W0201-03 Dillons Waste Ltd,WFP-KY-10-001,The Kerries ,Tralee ,Co. Kerry ,Kerry,ireland	Drehid Landfill,..Carbury,Co Kildare,Ireland
Within the Country	20 03 01	No	15.8 mixed municipal waste	D15	M	Weighed	Offsite in Ireland	Indaver IWMF,W0167-02	The Kerries ,Tralee ,Co. Kerry ,Kerry,ireland
Within the Country	20 03 01	No	8271.82 mixed municipal waste	R1	M	Weighed	Offsite in Ireland	Lagan Cement Ltd,P0487-05 Greenstar Holdings Ltd,W0146-02	Carlanstown,..Duleek,Co Meath,Ireland
Within the Country	20 03 01	No	25.14 mixed municipal waste	R1	M	Weighed	Offsite in Ireland	Lagan Cement Ltd,P0487-05 Greenstar Holdings Ltd,W0146-02	Kinnegad,..,Co Meath,Ireland
Within the Country	20 03 01	No	24.18 mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd ,W0178-01	Connaught Regional Landfill,..Ballinasloe,Co. Galway,Ireland
Within the Country	20 03 01	No	1975.8 mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd ,W0178-01	Fassaroe,Bray,Co. Wicklow,..,Ireland
Within the Country	20 03 01	No	4048.88 mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Greenstar Limited,W0053-03 Greenstar Holdings Ltd,W0146-02	Knockharley ,Navan,Co. Meath,..,Ireland
Within the Country	20 03 03	No	10524.02 street-cleaning residues	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd ,W0178-01	Connaught Regional Landfill,..Ballinasloe,Co. Galway,Ireland
Within the Country	20 03 03	No	20.66 street-cleaning residues	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd ,W0178-01	Ballynagran,Coolbeg & Kilcandra,Co. Wicklow,..,Ireland
Within the Country	20 03 03	No	583.24 street-cleaning residues	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd.,W0165-02	Knockharley ,Navan,Co. Meath,..,Ireland
Within the Country	20 03 07	No	3321.4 bulky waste	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd,W0146-02	Fassaroe,Bray,Co. Wicklow,..,Ireland
Within the Country	20 03 07	No	73.35 bulky waste	D5	M	Weighed	Offsite in Ireland	Greenstar Limited,W0053-03	Fassaroe,Bray,Co. Wicklow,..,Ireland

# **APPENDIX 2**

## Procedures List

<b>Doc. No.: Control</b>	<b>Revision No.: As Shown</b>	<b>Issue Date: As Shown</b>
<b>Approved By:</b>	Malcolm Dowling – <i>Group Environmental Manager</i>	<b>Page 1 of 4</b>
	Oliver Callan – <i>Group H&amp;S Manager</i>	

**Integrated Procedures - IP**

IP-01	Document & Record Control Procedure	Rev 01, 05/07/10
IP-02	Health & Safety Risk Assessment Procedure	Rev 01, 05/07/10
IP-03	Environmental Aspects & Impacts Procedure	Rev 01, 05/07/10
IP-04	Legal & Regulatory Requirements Procedure	Rev 02, 05/11/10
IP-05	Objectives, Targets & Management Programmes Procedure	Rev 01, 05/07/10
IP-06	Competence, Training & Awareness Procedure	Rev 01, 05/07/10
IP-07	Communication & Consultation Procedure	Rev 01, 05/07/10
IP-08	Monitoring, Measurement & Improvement Procedure	Rev 01, 05/07/10
IP-09	Evaluation of Compliance Procedure	Rev 02, 15/09/11
IP-10	Non Conformances, Corrective/Preventive Actions Procedure	Rev 03, 01/02/11
IP-11	Internal Audit Procedure	Rev 03, 28/05/12
IP-12	Management Review Procedure	Rev 01, 05/07/10
IP-13	Control of Contractors/Visitors Procedure	Rev 03, 08/06/12
IP-14	Health & Safety & Environmental Monitoring	Rev 02, 29/10/10
IP-15	Emergency Preparedness & Response Procedure	Rev 02, 01/02/11

**Safety Procedures - SP**

SP-01	Permit to Work Procedure	Rev 02, 03/05/12
SP-02	Maintenance & Calibration Procedure	Rev 03, 04/04/11
SP-03	Mobile Plant Procedure	Rev 01, 05/07/10
SP-04	Fork Truck Procedure	Rev 01, 05/07/10
SP-05	Operation of Fixed Plant Procedure	Rev 01, 05/07/10
SP-06	Lock Out / Tag Out Procedure	Rev 01, 05/07/10
SP-07	Health & Safety Notification Procedure	Rev 01, 05/07/10
SP-08	Motor Claim Notification Procedure	Rev 01, 01/02/11
SP-09	MSW Shredder routine Maintenance & Clearing of Blockages Procedure (SCGT)	Rev 01, 01/12/11
SP-10	Weighbridge & Tipping Procedure (SCGT)	Rev 01, 01/12/11
SP-11	Cleaning of Washing Bay (Greenogue)	Rev 01, 05/05/12



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<b>Approved By:</b>	Malcolm Dowling – <i>Group Environmental Manager</i> Oliver Callan – <i>Group H&amp;S Manager</i>	<b>Page 2 of 4</b>

**Environmental Procedures - EP**

EP-01	Office Waste & Energy Management Procedure	Rev 01, 05/07/10
EP-02	Decommissioning and Aftercare Procedure	Rev 02, 14/09/11
EP-03	Environment Communications Procedure	Rev 02, 13/09/10
EP-04	Waste Permits & Licences Procedure	Rev 01, 05/07/10
EP-05	Waste Acceptance Procedure	Rev 01, 05/07/10
EP-06	Unacceptable Waste Procedure	Rev 01, 05/07/10
EP-07	Waste & Material Storage Procedure	Rev 01, 05/07/10
EP-08	Waste Processing Procedure	Rev 01, 05/07/10
EP-09	Site Infrastructure Procedure	Rev 01, 05/07/10
EP-10	Nuisance Management Procedure (Site Specific)	(Site Specific)
EP-11	Civic Amenity Site Procedure	Rev 01, 05/07/10

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<b>Approved By:</b>	Malcolm Dowling – <i>Group Environmental Manager</i>	<b>Page 3 of 4</b>
	Oliver Callan – <i>Group H&amp;S Manager</i>	

**Amendment History**

Date	Amendment No.	Procedure No:	Revision No:	Comment	Authorised By
05.07.10	01	All	01	Initial Issue	M.D & O.C
13.09.10	02	EP-03	02	Issue of Incident Reports	M.D
20.09.10	03	IP-10	02	Env issues not logged on WIMS Database	M.D
29.10.10	04	IP-13	02	Use of M&M equipment by contractors	M.D & O.C
29.10.10	05	IP-14	02	Use of M&M equipment by contractors	M.D & O.C
29.10.10	06	SP-02	02	Inclusion of Maintenance Schedule	M.D & O.C
05.11.10	07	IP-04	02	Inclusion of other requirements	S.B & O.C
01.02.11	08	SP-08	01	Inclusion of new procedure	O.C
01.02.11	09	IP-10	03	Inclusion of SP-08	O.C
01.02.11	10	IP-15	02	Removal of SF-022	O.C
01.02.11	11	Contents	As shown	EP-10 Site Specific	M.D & O.C
01.02.11	12	Circ List	02	Amendment to document control	M.D & O.C
04.04.11	13	SP-02	03	Inclusion of Site Specific Maintenance schedules	O.C
07.06.11	14	IP-11	02	Inclusion of H&S & Env Internal Audit Schedules	M.D & O.C
14/09/11	15	EP-02	02	Inclusion of decommissioning of plant/equipment	S.B
15/09/11	16	IP-09	02	Inclusion of Statutory Inspections	O.C
01/12/11	17	SP-09	01	Inclusion of new procedure for SCGT	O.C
01/12/11	18	SP-10	01	Inclusion of new procedure for SCGT	O.C
03/05/12	19	SP-01	02	Amendment to remove SF 028	O.C
05/05/12	20	SP-11	01	Inclusion of a new procedure for Greenogue	O.C
28/05/12	21	IP-11	03	General Amendments to internal audit procedure	M.D & O.C
08/06/12	22	IP-13	03	Grammatical amendment	M.D & O.C



<b>Doc. No.:</b> Control	<b>Revision No.:</b> 02	<b>Issue Date:</b> 1 <sup>st</sup> February 2011
<b>Approved By:</b>	Malcolm Dowling – Group Environmental Manager Oliver Callan – Group H&S Manager	<b>Page 4 of 4</b>

**Circulation List**

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