



**ANNUAL ENVIRONMENTAL REPORT**  
**GREENSTAR LIMITED**  
**MATERIALS RECOVERY FACILITY**  
**MILLENNIUM BUSINESS PARK**  
**LICENCE NO. W0183-01**  
**JANUARY 2011 – DECEMBER 2011**

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# 1. INTRODUCTION

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This is the 2011 Annual Environmental Report (AER) for the Greenstar Ltd. (Greenstar), Materials Recovery Facility (MRF) at Millennium Business Park, Grange, Ballycoolin, Dublin 11. The Waste Licence (Register No.W0183-01) for the facility was issued on 15<sup>th</sup> April 2005 and the facility began accepting waste in mid July 2006.

This AER covers the period from January 2011 to December 2011. The content is based on Schedule G 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>. Cognisance was also taken of the AER Draft Guidance Document issued in January 2012<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 EPA (Environmental Protection Agency) 1999 Waste Licensing – Draft Guidance on Environmental Management Systems and Reporting to the Agency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

#### 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 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).

### *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.

### *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**

No.	Plant	Model	Operational Capacity tpd	Standby Capacity tpd
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	C&I Loading grab	Fuchs MHL 335	2160	1710
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 RORO shunter		216	88

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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 the paved area of the site and roofed areas. As only Phase 1 & 2 of the facility has been constructed, approximately 50% of the site is currently paved.

During the monitoring period there was only flow in SW-1 and SW-2 on one occasion, in Q4 2011. At all other times the monitoring locations were dry. The sampling and analysis was carried out in accordance with recognised quality assurance and control procedures.

The trigger levels set for total suspended solids were exceeded in SW-2 in Q-4. The Agency was informed of this incident. All other 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 '11	Q2 '11	Q3'11	Q4 '11	Trigger Levels
pH	pH Units	Dry	Dry	Dry	8	N/A
Conductivity	mS/cm	Dry	Dry	Dry	0.436	N/A
Temperature	°C	Dry	Dry	Dry	11	N/A
Ammoniacal Nitrogen	mg/l	Dry	Dry	Dry	2.13	N/A
BOD	mg/l	Dry	Dry	Dry	3	25
COD	mg/l	Dry	Dry	Dry	13	N/A
Total Suspended Solids	mg/l	Dry	Dry	Dry	NDP	35
Oils, Fats & Greases	mg/l	Dry	Dry	Dry	<0.01	N/A
Mineral Oils	mg/l	Dry	Dry	Dry	<0.01	5

NDP – No detection possible

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

Parameter	Units	Q1 '11	Q2 '11	Q3 '11	Q4 '11	Trigger Levels
pH	pH Units	Dry	Dry	Dry	8.31	N/A
Conductivity	mS/cm	Dry	Dry	Dry	0.569	N/A
Temperature	°C	Dry	Dry	Dry	10.8	N/A
Ammoniacal Nitrogen	mg/l	Dry	Dry	Dry	1.85	N/A
BOD	mg/l	Dry	Dry	Dry	8	25
COD	mg/l	Dry	Dry	Dry	45	N/A
Total Suspended Solids	mg/l	Dry	Dry	Dry	488	35
Oils, Fats & Greases	mg/l	Dry	Dry	Dry	<0.01	N/A
Mineral Oils	mg/l	Dry	Dry	Dry	<0.01	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 2011. 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 '11	Apr '11	Jun '11	Aug '11	Oct '11	Dec' 11	Emission Limit
pH	pH Units	7.26	8.12	7.72	7.72	8.12	8.32	6 – 10
Temperature	°C	12.0	13.1	13.3	13.2	14.8	10.2	42
Ammoniacal Nitrogen	mg/l	2.47	2.52	41.42	4.55	10.97	1.89	100
BOD	mg/l	44	318	262	177	223	5	6,000
COD	mg/l	229	782	561	365	559	44	12,000
Total Suspended Solids	mg/l	152	229	757	65	26	184	2,500
Oils, Fats & Greases	mg/l	<1	0.23	<0.01	<0.01	2.78	<0.01	100
Orthophosphate	mg/l	<1	2.305	24.26	0.89	3.57	<0.06	100
Surfactants	mg/l	<0.21	2.3	0.4	0.9	0.6	<0.2	100
Sulphate	mg/l	104.5	201.29	13.01	95.03	97.87	217.3 7	1,000

### 3.3 Noise Monitoring

The annual noise survey was carried out in June 2011. The full monitoring report was submitted to the Agency on the 22<sup>nd</sup> August 2011. 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 70 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 2011

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	1513- 1543	55	57	49	55	Façade vents continuously audible at low level, although dominant. Truck movements on yard areas audible. No other emissions audible apart from bird calls and intermittent aircraft.
N2	1547- 1617	60	62	47	60	Façade fans dominant until shut down at 1550. Thereafter, other onsite sources almost continuously audible, including processing plant audible through building doors and truck movements. Bird calls, intermittent aircraft and lightly rustling vegetation.
N3	1433- 1503	70	72	69	70	Greenstar façade vents dominant. Truck movements in local yard area also audible. No other noise audible apart from occasional front end loader movements at adjacent premises.
NSL1	1634- 1704	70	75	48	<48	No site emissions audible. Local road traffic almost continuously audible on approaches, and dominant. Intermittent aircraft significant.

\* Specific level: Sound pressure level contribution considered attributable to facility.

### 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 April/May, May/June and June/July 2011. 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.

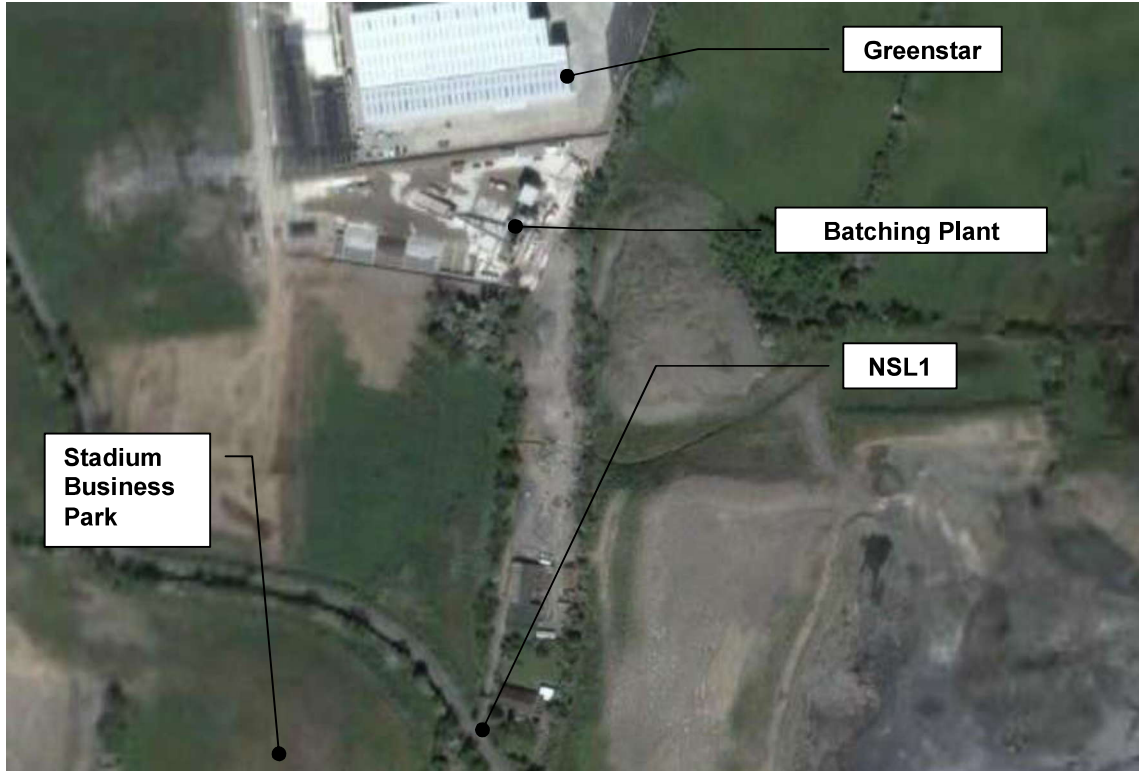
In 2011 there were no exceedances of the dust deposition limit at any of the monitoring locations. The dust monitoring programme has shown that the facility is not a significant source of dust.

**Table 3.4** Dust Monitoring Results

Monitoring Location	Units	April/May '11	May/June '11	June/July '11	Deposition Limit Value
DS-01	mg/m <sup>2</sup> /day	55.7	37.3	43.7	350
DS-02	mg/m <sup>2</sup> /day	67.5	146.4	27.1	350
DS-03	mg/m <sup>2</sup> /day	259.4	246.3	77.4	350
DS-04	mg/m <sup>2</sup> /day	107.7	225.6	47.2	350



**Figure 3.2 Noise Sensitive Location**



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## 4. SITE DEVELOPMENT WORKS

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### 4.1 Specified Engineering Works

No engineering works were carried out in 2011. In Q2 2012 Greenstar proposes to develop the storage area available for Solid Refuse derived Fuel (SRF) bale storage at the facility. Approximately 2,800m<sup>2</sup> of permeable area will be concreted.

### 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** Estimates of Resources Used On-Site 2011

Resources	Quantities
Diesel (green)	82129 litres
Electricity	1,716,000 Units
Hydraulic, Transmission & Engine Oil	2000 litres
Truck Wash Detergent	100 litres
Mains Water	2,000,000 litres
Anti Freeze	60 litres
Natural Gas	58347 Units

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

### 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. The bunds were tested in May 2009 and the drains in January 2010 and were passed fit for purpose. Testing will be carried out again in 2012.

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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 2011. Table 5.2 shows the total quantities of waste received and consigned in 2010. 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. A more detailed description of the wastes accepted and consigned is provided in the PRTR submission in Appendix 1.

The total quantity of waste received was 87,191 tonnes. The total waste consigned was 83,181 tonnes. The remaining difference is due to waste which remained on site at the end of 2011 which will be consigned in 2012 and the presence of rainwater in the open top skips brought on-site during the reporting period.

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

**Table 5.1** 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, restaurants	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 5.2** Waste Received & Consigned 2010

<b>EWC</b>	<b>Description</b>	<b>Waste In</b>	<b>Waste Out</b>
07 05 13*	Potentially contaminated MSW		117.58
10 01 01	Ash	1.00	
10 03 05	LDF Alumina	10.00	
15 01 01	Cardboard & Paper Packaging	769.00	659.30
15 01 02	Plastic Packaging	120.00	18.00
15 01 03	Wooden Packaging	607.00	41.62
15 01 06	Mixed Packaging	3,813.00	3,546.23
15 01 07	Glass Packaging	54.00	
16 01 03	Tyres	6.00	
17 01 01	Concrete from C&D Waste	7,000.00	
17 04 11	Cables from C&D Waste not containing dangerous substances	1.00	
17 05 04	Soil & Stone from C&D Waste	16.00	56.00
19 09 02	Sludge		2.00
19 09 05	Resin	6.00	
19 12 01	Paper & Cardboard	25.00	
19 12 07	Processed Wood	498.00	3,475.26
19 12 09	Minerals from mechanical treatment	3.00	18,999.15
19 12 10	RDF Combustible		51.38
19 12 12	Mixed Residual Waste from mechanical treatment	21,318.00	1,067.40
20 01 01	Paper & Cardboard	22.00	5.12
20 01 02	Glass	8.00	
20 01 08	Commercial Food Wastes	1,068.00	2,686.00
20 01 35*	WEEE	0.50	
20 01 38	Wood from municipal sources	1,210.00	2,875.00
20 01 39	Plastic from municipal sources	4.00	
20 01 40	Metal from municipal sources	291.00	2,207.19
20 01 99	Gas Cylinders		2.00
20 02 01	Biodegradable garden & park waste	4,809.00	2,424.00
20 03 01	Mixed Residual Waste	4,723.00	
20 03 07	Bulky Waste	28,312.00	30,635.36
	<b>Total Received</b>	<b>74,694.50</b>	
	<b>Total Consigned</b>		<b>68,868.59</b>

**Table 5.3** Waste Received & Consigned

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



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

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### **6.1 Incidents**

The routine monitoring programme identified one low ranking incident relating to an exceedance of the suspended solids trigger level at the surface water monitoring location SW-2 in December 2011. The incident was reported to the Agency and was considered anomalous. There were no other reportable incidents.

### **6.2 Register of Complaints**

Greenstar maintains a register of complaints received in accordance with Condition 9.4 of the waste licence. One complaint in relation to odour at the facility was received in 2011. A copy of the complaints register which includes a description of the actions taken by Greenstar is included in Appendix 2.

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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 3.

The schedule of Objectives and Targets, including their status for 2011 (Table 7.1), as well as the proposed Objectives and Targets for 2012 (Table 7.2) are presented below.

#### *7.1.1 Site Management Structure*

Management and Staffing structure: -

**Name:** Aidan Shanahan

**Responsibility:** Head of MRF Operations

**Experience:** 8 years experience waste management experience; has completed the FÁS waste management course.

**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:** Brian O Toole

**Responsibility:** Site Operations Manager

**Experience:** 6 months experience in Waste management, 15 years food and general industry experience.

### *7.1.2 Staff Training*

Environmental Awareness Training was carried out in 2011.

## **7.2 Environmental Management Programme**

### *7.2.1 Schedule of Objectives 2011*

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 2011.

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

Nuisance control procedures are reviewed annually as part of ISO 14001 or more frequently should an incident arise at the facility.

#### **Objective 3 – Pollution Prevention**

With the exception of one anomalous surface water result in Q4 2011 the facility was compliant with the emission limits set in the Licence.

#### **Objective 4 – Energy Consumption**

Energy consumption is reviewed quarterly as part of ISO 14001.

### *7.2.2 Schedule of Objectives 2012*

A schedule of targets and objectives for 2012 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 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 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 2011 –

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	Complete
2	<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.	Facility Manager	Complete
3	<b>Pollution Prevention</b>	Strive to ensure that monitoring results comply with the licence limits and investigate any exceedances of emission limit values.	Facility Manager	Complete
4	<b>Energy Consumption</b>	Retrofit energy efficient lighting inside the MRF building.	Facility Manager	Complete
		Investigate the night load for the MRF with the target of reducing this to approximately 50 kW		

**Table 7.2** Schedule of Objective and Targets 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	Q4 2012
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	Q1-Q4 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	Q2 2012
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	Q1-Q4 2012
5	<b>Infrastructure</b>	Concrete storage area for SRF Bales externally	Facility Manager	Q2 2012

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

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

#### **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**

Under the European Pollutant Release and Transfer Register Regulation (EC) No. 166/2006 Greenstar 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 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. There was not any wastewater/sludge removed off site in 2011 from the bund, interceptors and drainage lines as part of the sites routine cleaning programme. 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 2011.



# **APPENDIX 1**

## European Pollutant Release and Transfer Register



Environmental Protection Agency

| PRTR#: W0183 | Facility Name : Greenstar Limited | Filename : W0183\_2011.xls |  
Return Year : 2011 |

[Guidance to completing the PRTR workbook](#)

# AER Returns Workbook

Version 1.1.13

<b>REFERENCE YEAR</b>	2011
-----------------------	------

## 1. FACILITY IDENTIFICATION

Parent Company Name	Greenstar Holdings 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
AER Returns Contact Name	Suzanne Byrne
AER Returns Contact Email Address	suzanne.byrne@greenstar.ie
AER Returns Contact Position	Environmental Engineer
AER Returns Contact Telephone Number	01-2947949
AER Returns Contact Mobile Phone Number	0860433983
AER Returns Contact Fax Number	01-2947900
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours In Year	0
Number of Employees	0
User Feedback/Comments	
Web Address	

## 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?	
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#: W0183 | Facility Name: Greenstar Limited | Filname: W0183\_2011.xls | Return Year: 2011 ]

27/03/2012 08:54

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

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

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

SECTION B : REMAINING PRTR POLLUTANTS

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

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

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

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

\* 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 (CH<sub>4</sub>) 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

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

4.2 RELEASES TO WATERS

[Link to previous years emissions data](#)

| PRTR#: W0163 | Facility Name : Greenstar Limited | Filename : W0163\_2011.xls | Return Year : 2011 |

27/03/2012 06:54

**SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS**

**RELEASES TO WATERS**

POLLUTANT	M/C/E	Method Code	Method Used Designation or Description	Emission Point 1			QUANTITY	
				T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	T (Total) KG/Year	F (Fugitive) KG/Year
No. Annex II				0.0	0.0	0.0	0.0	0.0

**Please enter all quantities in this section in KGs**

**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 !**

\* 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**

POLLUTANT	M/C/E	Method Code	Method Used Designation or Description	Emission Point 1			QUANTITY	
				T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	T (Total) KG/Year	F (Fugitive) KG/Year
No. Annex II				0.0	0.0	0.0	0.0	0.0

**Please enter all quantities in this section in KGs**

\* 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**

POLLUTANT	M/C/E	Method Code	Method Used Designation or Description	Emission Point 1			QUANTITY	
				T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	T (Total) KG/Year	F (Fugitive) KG/Year
Pollutant No.				0.0	0.0	0.0	0.0	0.0

**Please enter all quantities in this section in KGs**

\* 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\_2011\_46 | Return Year : 201

27/03/2012 09:54

SECTION A : PRTR POLLUTANTS

No. Annex II	Name	OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER		METHOD		Please enter all quantities in this section in KGs		
		M/C/E	METHOD Code	Method Used	Description 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 POLLUTANT EMISSIONS (as required in your Licence)

Pollutant No.	Name	OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER		METHOD		Please enter all quantities in this section in KGs		
		M/C/E	METHOD Code	Method Used	Description or Description	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
238	Ammonia (as N)	E	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited		31.91	31.91	0.0
303	BOD	E	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited		514.5	514.5	0.0
306	COD	E	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited		1270.0	1270.0	0.0
308	Detergents (as MBAS)	E	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited		3.15	3.15	0.0
314	Fats, Oils and Greases	E	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited		4.515	4.515	0.0
343	Sulphate	E	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited		364.535	364.535	0.0
240	Suspended Solids	E	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited		706.5	706.5	0.0

4.4 RELEASES TO LAND

[Link to previous years emissions data](#)

| PRTR# : W0163 | Facility Name : Greenstar Limited | Filename : W0163\_2011.xls | Return Year : 2011 |

27/03/2012 08:54

SECTION A : PRTR POLLUTANTS

POLLUTANT		METHOD		QUANTITY	
No. Annex II	Name	M/C/E	Method Used Designation or Description	T (Total) KG/Year	A (Accidental) KG/Year
				0,0	0,0

Please enter all quantities in this section in KGs

\* 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		METHOD		QUANTITY	
Pollutant No.	Name	M/C/E	Method Used Designation or Description	T (Total) KG/Year	A (Accidental) KG/Year
				0,0	0,0

Please enter all quantities in this section in KGs

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

**5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE**

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	Licence/Permit No of New Destination Facility Name and Licence No of Recover Disposer	Licence/Permit No of New Destination Facility Name and Licence No of Recover Disposer	Actual Address of Final Destination (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used				
Within the Country	10 01 01	No		bottom ash, slag and boiler dust (excluding 4.0 boiler dust mentioned in 10 01 04)	D5	M	Weighed	Offsite in Ireland	Greenstar Millennium Park, W0183-01	Millennium Park Business Park, Ballycoolin, Dublin, Dublin, Ireland	
Within the Country	15 01 01	No	272.0	paper and cardboard packaging	R3	M	Weighed	Offsite in Ireland	Bailey Waste Recycling, WFFP- Road Blanchardstown, Dublin 16, Ireland	Park, Ballycoolin Rosemount Business Park, Ballycoolin Blanchardstown, Dublin 16, Ireland	
Within the Country	15 01 03	No	41.0	wooden packaging	R3	M	Weighed	Offsite in Ireland	Max Pallet Services Ltd, Not Required	Colemanstown Rathcoole Co Dublin, Ireland	
Within the Country	15 01 06	No	4889.0	mixed packaging	R3	M	Weighed	Offsite in Ireland	Greenstar Limited, W0053-03	Fassaree, Bray Co, Wicklow, Ireland	
Within the Country	16 01 03	No	93.0	end-of-life tyres	R5	M	Weighed	Offsite in Ireland	Crumb Rubber Ireland Limited, .	Moortown Dromiskin, Dundalk Co., Louth, Ireland	
Within the Country	16 05 04	Yes	3.0	halons) containing dangerous substances	R4	M	Weighed	Offsite in Ireland	BOC Gas Dublin, .	Bluebell, Dublin 12, Ireland Cappincur Industrial Estate, Dairghean Road, Tullamore Co, Wicklow, Ireland	
Within the Country	17 09 04	No	53.0	lead batteries mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	R3	M	Weighed	Offsite in Ireland	KMK Metals, Greenstar Holdings Ltd, W0165-02	Ballynagrain, Coolbeg & Kildare Co, Wicklow, Ireland	
Within the Country	17 05 04	No	2435.0	soil and stones other than those mentioned in 17 05 03	R5	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd, W0165-02	Ballynagrain Coolbeg & Kildare Co, Wicklow, Ireland	
Within the Country	17 05 04	No	1864.0	soil and stones other than those mentioned in 17 05 03	R5	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd, W0165-02	Knockhatley Navan Co, Wicklow, Ireland	
Within the Country	17 05 04	No	3322.0	soil and stones other than those mentioned in 17 05 03	R5	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd, W0165-02	Knockhatley Navan Co, Wicklow, Ireland	
Within the Country	19 12 07	No	568.0	wood other than that mentioned in 19 12 06	R3	M	Weighed	Offsite in Ireland	Eirebloc, CK(S) 503/07	Lissarda Co, Cork, Ireland Fassaree, Bray Co, Wicklow, Ireland	
Within the Country	19 12 07	No	32.0	wood other than that mentioned in 19 12 06	R3	M	Weighed	Offsite in Ireland	Greenstar Limited, W0053-03	Ballynagrain, Coolbeg & Kildare Co, Wicklow, Ireland	
Within the Country	19 12 07	No	995.0	wood other than that mentioned in 19 12 06	R3	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd, W0165-02	Kildare Co, Wicklow, Ireland	
Within the Country	19 12 07	No	2477.0	wood other than that mentioned in 19 12 06	R3	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd, W0165-02	Kildare Co, Wicklow, Ireland	
Within the Country	19 12 07	No	1793.0	wood other than that mentioned in 19 12 06	R3	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd, W0165-02	Kildare Co, Wicklow, Ireland	
Within the Country	19 12 07	No	105.0	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 Kildare Co, Wicklow, Ireland	
Within the Country	19 12 07	No	297.0	wood other than that mentioned in 19 12 06	R3	M	Weighed	Offsite in Ireland	Waddock Composting Facility, WFP-QW-11-05-01	Tullow, Carlow Co, Carlow, Ireland	
Within the Country	19 12 09	No	1593.0	minerals (for example sand, stones)	R3	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd, W0165-02	Ballynagrain, Coolbeg & Kildare Co, Wicklow, Ireland	
Within the Country	19 12 09	No	4208.0	minerals (for example sand, stones)	R3	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd, W0165-02	Knockhatley Navan Co, Wicklow, Ireland	
Within the Country	19 12 09	No	352.0	minerals (for example sand, stones)	R3	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd, W0165-02	Kildare Co, Wicklow, Ireland	
Within the Country	19 12 09	No	10562.0	minerals (for example sand, stones) other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R3	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd, W0165-02	Ballynagrain, Coolbeg & Kildare Co, Wicklow, Ireland	
Within the Country	19 12 12	No	21.0	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D5	M	Weighed	Offsite in Ireland	MRF Bray Greenstar, .	Bray Co, Wicklow, Ireland	

Within the Country	19 12 12	No	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D5	M	Weighted	Offsite in Ireland	Greenstar Holdings Ltd, W0165-02	Ballynagran, Coolbeg & Kiltandra, Co. Wicklow, Ireland
Within the Country	19 12 12	No	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D5	M	Weighted	Offsite in Ireland	Greenstar Holdings Ltd, W0146-02	Knockharley Navan, Co. Meath, Ireland
Within the Country	19 12 12	No	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D5	M	Weighted	Offsite in Ireland	KTK Landfill, W0081-01	Kilcullen, Co. Kildare, Ireland
Within the Country	19 12 12	No	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D5	M	Weighted	Offsite in Ireland	Greyhound Recycling & Recovery, W0205-01	Crag Ave., Clontarf, Dublin 22, Ireland
Within the Country	19 12 12	No	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D5	M	Weighted	Offsite in Ireland	Bord na Mona, W0201-03	Drehid Landfill, Carbury, Co. Kildare, Ireland
Within the Country	19 12 12	No	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D5	M	Weighted	Offsite in Ireland	MRF Bray Greenstar, .	...Bray Co. Wicklow, Ireland
Within the Country	19 12 12	No	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D5	M	Weighted	Offsite in Ireland	KTK Landfill, W0081-01	Kilcullen, Co. Kildare, Ireland
Within the Country	19 12 12	No	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D5	M	Weighted	Offsite in Ireland	Indaver HWMF, W0167-02	Carbinstown, Duleek, Co. Meath, Ireland
Within the Country	19 12 12	No	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D5	M	Weighted	Offsite in Ireland	Bord na Mona, W0201-03	Drehid Landfill, Carbury, Co. Kildare, Ireland
Within the Country	20 01 08	No	109.0 biodegradable kitchen and canteen waste	R3	M	Weighted	Offsite in Ireland	Acom Recycling, W0249-01	... Littleton, Co. Tipperary, Ireland
Within the Country	20 01 08	No	5969.0 biodegradable kitchen and canteen waste	R3	M	Weighted	Offsite in Ireland	O'Toole Composting, WFP-CW-10-0003-01	Ballintrahe, Fenagh, Co. Carlow, Ireland
Within the Country	20 01 38	No	55.0 wood other than that mentioned in 20 01 37	R3	M	Weighted	Offsite in Ireland	Ormonde Organics, WFP-WD-10-0003-01	Kilbreen, Portlaw Co. Waterford, Ireland
Within the Country	20 01 38	No	943.0 wood other than that mentioned in 20 01 37	R3	M	Weighted	Offsite in Ireland	Eirebros, CK(S) 503 07	Lisarda, Co. Cork, Ireland
Within the Country	20 01 40	No	117.0 metals	R4	M	Weighted	Offsite in Ireland	Metals Recycling at Hammond Lane, Metal Co. Ltd, WFP-CK-10-0077-02	... Blessington Co. Wicklow, Ireland
Within the Country	20 01 40	No	2391.0 metals	R4	M	Weighted	Offsite in Ireland	Enrich Environmental Ltd, WFP-09/0004/01	... Ringskiddy Co. Cork, Ireland
Within the Country	20 02 01	No	41.0 biodegradable waste	R3	M	Weighted	Offsite in Ireland	Greenstar Holdings Ltd, W0146-02	Larch Hill Stud, Killocock, Co. Meath, Ireland
Within the Country	20 03 03	No	2188.0 street-cleaning residues	D5	M	Weighted	Offsite in Ireland	KTK Landfill, W0081-01	Knockharley Navan, Co. Meath, Ireland
Within the Country	20 03 03	No	310.0 street-cleaning residues	D5	M	Weighted	Offsite in Ireland	MRF Bray Greenstar, .	...Bray Co. Wicklow, Ireland
Within the Country	20 03 07	No	15.0 bulky waste	R5	M	Weighted	Offsite in Ireland	Greenstar Holdings Ltd, W0146-02	Knockharley Navan, Co. Meath, Ireland
Within the Country	20 03 07	No	10727.0 bulky waste	R5	M	Weighted	Offsite in Ireland	Greyhound Recycling & Recovery, W0205-01	Crag Ave., Clontarf, Dublin 22, Ireland
Within the Country	20 03 07	No	893.0 bulky waste	R5	M	Weighted	Offsite in Ireland	Enva Ireland Ltd, W0184-01	Portlaoise, Co. Laois, Ireland
Within the Country	13 02 08	Yes	3.0 other engine, gear and lubricating oils	R5	M	Weighted	Offsite in Ireland	Lagan Cement Ltd, P0487-05	Kinnegad, Co. Meath, Ireland
Within the Country	19 12 10	No	2236.0 combustible waste (refuse derived fuel)	R5	M	Weighted	Offsite in Ireland	Greyhound Recycling & Recovery, W0205-01	Crag Ave., Clontarf, Dublin 22, Ireland
Within the Country	19 12 10	No	977.0 combustible waste (refuse derived fuel)	R5	M	Weighted	Offsite in Ireland		



# **APPENDIX 2**

## Complaints Register

<b>Date Opened</b>	<b>Details of the Issue</b>	<b>Person Responsible</b> <i>(Facility Manager, Env Executive, Site Supervisor etc)</i>	<b>Corrective Action</b>
<b>14.11.11</b>	K.Geoghegan/artisan furniture/odour	JR	with reduced intake of material O tooles to collect 3 times per week, regardless of tonnes on floor

# **APPENDIX 3**

## 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 02, 07/06/11
IP-12	Management Review Procedure	Rev 01, 05/07/10
IP-13	Control of Contractors/Visitors Procedure	Rev 02, 29/10/10
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 01, 05/07/10
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



<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 2 of 4</b>
	Oliver Callan – <i>Group H&amp;S Manager</i>	

<b>Environmental Procedures - EP</b>		
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