



**ANNUAL ENVIRONMENTAL REPORT**  
**GREENSTAR ENVIRONMENTAL SERVICES LIMITED**  
**MATERIALS RECOVERY FACILITY**  
**SIX CROSS ROADS BUSINESS PARK**  
**WATERFORD**  
**LICENCE NO. W0177-03**  
**JANUARY 2012 – DECEMBER 2012**

**Prepared For: -**

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

**Prepared By: -**

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

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Report No	Date	Status	Prepared By	Reviewed By
0480506	22/03/2013	Draft	Michael Watson MA.	Jim O'Callaghan MSc
0480506	26/03/2013	Final	Michael Watson MA.	Jim O'Callaghan MSc

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## 1. INTRODUCTION

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This is the 2012 Annual Environmental Report (AER) for the Greenstar Environmental Services Ltd. (GES), Materials Recovery Facility (MRF) at Six Cross Roads Business Park, Waterford (W0177-03) and covers the reporting period January 2012 to December 2012.

The content is based on Schedule F of the Waste Licence and the report format follows guidelines set in the “Guidance Note for Annual Environmental Report” issued by the Environmental Protection Agency (Agency)<sup>1</sup>. Cognisance was also taken of the Agency AER Draft Guidance Document and AER Information Templates issued by the Agency in January 2013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 EPA (Environmental Protection Agency) 1999 Waste Licensing – Draft Guidance on Environmental Management Systems and Reporting to the Agency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 subject site is located at Carriganard, Six Cross Roads approximately 3.5 km southwest of Waterford City Centre. It is in an industrial area on the outskirts of the City. The area to the west of the facility is mainly farmland. The nearest residential area is the Ballybeg housing estate, which is approximately 500 m to the north. The facility encompasses approximately 9,300 m<sup>2</sup> and is accessed by a county road (Green Road) off the N25 National Primary Route. This county road, which forms the western site boundary, is a cul-de-sac which is used solely for access to the facility. The southern and eastern boundaries are formed by the Six Cross Roads Business Park and the northern boundary by the closed Waterford City Compost Facility

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

### 2.2 Waste Management Activities

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

#### 2.2.1 Waste Types & Processes

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

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

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

The key processes carried out at the facility include: -

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

#### *Household Waste*

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

#### *Commercial and Industrial Waste*

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

#### *C&D Waste*

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

### 2.2.2 Plant List

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

**Table 2.1 Plant List –**

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

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### 3. EMISSION MONITORING

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The monitoring specified in the licence includes surface water, wastewater, groundwater, dust and noise monitoring. The monitoring locations are shown on Figure 3.1. The monitoring results are included in reports submitted to the Agency at quarterly intervals and an overview of the monitoring completed in 2012 is presented in this Section.

#### 3.1 Surface Water Monitoring

The facility surface water drainage system collects run-off from paved areas and roof rainwater. The run-off is discharged to a culverted stream serving the Business Park at three separate locations. In the first two quarters there were four monitoring locations (SW-1, SW-2, SW-3 and SW-4) which are shown on Figure 3.1. After discussion with the Agency on June 28<sup>th</sup> it was agreed to replace SW-1 and 2 with SW-5. In the final two quarters there were three monitoring locations, SW-3, SW-4 and SW-5.

SW-1 is on the outfall from an oil interceptor serving the yard areas to the east and west of the main recycling building. SW-2 is the runoff from the roof of the main recycling building. The flow through SW-1 (yard) combines with that through SW-2 (roof) and discharges to the stream to the west of the site. SW-3 is downstream of an oil interceptor on the drain that takes runoff from the western yard, and is a separate discharge point. SW-4 monitors the discharge from the roof of the lean-to in the north western section of the site. SW-5 monitors the combined discharge from the storm sewer from the east and south of the site (SW-1) and the discharge from the roof storm sewer of the Main Recycling Building and Offices (SW-2)

For ease of comparison, the monitoring results for the first two quarters are shown on Tables 3.1 to 3.4. The results for the last two quarters, when SW-5 replaced SW-1 and SW-2, are shown on Tables 3.5 to 3.7. Due to dry conditions in the first quarter there was no surface water samples obtained. The results include the proposed warning and action levels developed by GES in Q1 2010. There were a number of exceedances of the warning for both ammonia and conductivity, but no breach of the action levels throughout 2012. A review of the outdoor material storage was conducted in early June 2011 at the western end of the site where outdoor material storage has previously been agreed with the Agency. Certain waste types were relocated and this action has led to improvements in the surface water discharge quality.

Ormonde Environmental was contracted by GES on the 26th September 2011 to carry out integrity testing and complete a survey of the entire surface and foul water system. Additional cleaning of the pipelines and interceptors was also carried out during their three days at the site. This investigation revealed that the main surface water line running parallel to the building and outdoor materials storage area contained a significant amount of concrete. The concrete was removed and the pipelines were deemed fit for purpose.



There was significant focus on drain maintenance at the facility during 2012. In February 2012 oily waste was removed from the interceptors and in June 2012 the jetting, de-silting and on-site disposal of the foul water and surface water systems. Regular cleaning of the water systems has maintained the quality of the surface water discharge.

A detailed report on the surface water drainage system in terms of layout, materials storage and monitoring analysis was submitted to the Agency in June 2012.

Overall results for surface water at monitoring locations SW1 and SW3 have markedly improved between 2011 and 2012.

**Table 3.1** Surface Water Monitoring Results Second Quarter 2012 SW-1

Parameter	Units	25/04	2/05	28/06	Warning Levels	Action Level
Ammonia	mg/l	2.67	2.35	0.51	2.0	4.4
Conductivity	mS/cm	0.289	0.184	0.116	0.466	0.774

**Table 3.2** Surface Water Monitoring Results Second Quarter 2012 SW-2

Parameter	Units	25/04	2/05	28/06	Warning Levels	Action Level
Ammonia	mg/l	0.62	0.93	0.40	2.0	4.4
Conductivity	mS/cm	0.043	0.05	0.027	0.466	0.774

**Table 3.3** Surface Water Monitoring Results Second Quarter 2012 SW-3

Parameter	Units	25/04	2/05	28/06	Warning Levels	Action Level
Ammonia	mg/l	0.84	1.02	0.80	2.0	4.4
Conductivity	mS/cm	0.528	0.204	0.181	0.466	0.774

**Table 3.4** Surface Water Monitoring Results Second Quarter 2012 SW-4

Parameter	Units	25/04	2/05	28/06	Warning Levels	Action Level
Ammonia	mg/l	0.74	1.07	0.44	2.0	4.4
Conductivity	mS/cm	0.053	0.045	0.025	0.466	0.774

**Table 3.5** Surface Water Monitoring Results Third and Fourth Quarter 2012 SW-3

Parameter	Units	24/08	25/09	22/11	Warning Levels	Action Level
Ammonia	mg/l	0.41	3.63	0.78	2.0	4.4
Conductivity	mS/cm	0.241	0.632	0.291	0.466	0.774

**Table 3.6** Surface Water Monitoring Results Third and Fourth Quarter 2012 SW-4

Parameter	Units	24/08	25/09	22/11	Warning Levels	Action Level
Ammonia	mg/l	0.23	0.32	0.06	2.0	4.4
Conductivity	mS/cm	0.029	0.084	0.008	0.466	0.774

**Table 3.7** Surface Water Monitoring Results Third and Fourth Quarter 2012 SW-5

Parameter	Units	24/08	25/09	22/11	Warning Levels	Action Level
Ammonia	mg/l	0.69	2.79	0.27	2.0	4.4
Conductivity	mS/cm	0.169	0.519	0.175	0.466	0.774

### 3.2 Foul water Monitoring

The wastewater discharge (vehicle cleaning and run off from hard-standing at the entrance to the main recycling building) to the municipal sewer is monitored at quarterly intervals. The wastewater passes through a petrol/oil interceptor before discharging to the municipal sewer. Flow is measured using a continuous flow meter.

The wastewater sampling is carried out at location FW-1, as shown on Figure 3.1. FW-1 is downstream of the interceptor and the continuous flow meter. The monitoring results are presented in Table 3.8, which also includes the emission limit values (ELV) set in the Licence.

In October 2011, GES applied to the Agency for a technical amendment of the licence to either increase the limit set for surfactants or remove the limit entirely. The ELV does not appear to take into consideration that the wastewater discharges to a foul sewer and is treated in a municipal wastewater treatment plant. The Agency responded April 30<sup>th</sup> 2012 and agreed to suspend the requirement for reporting an exceedance of the ELV, for detergents only, as an incident pending the assessment of the request for the Technical Amendment. The Technical Amendment was awarded on 22<sup>nd</sup> February 2013. A new limit of 30mg/l replaces the previous suspended limit of 0.2mg/l. As expected all of the detergent detections were considerably below the new limit.

**Table 3.8** Foul water Monitoring Results 2012.

Parameter	Units	Q1	Q2	Q3	Q4	Emission Limit	Emission Limit (Grab Sample)*
pH	pH Units	6.82	6.29	7.71	7.39	6 – 9	6-9
Conductivity	mS/cm	-	0.358	0.358	0.683	-	-
BOD	mg/l	114	129	438	472	400	480
COD	mg/l	236	279	853	892	1,100	1,320
Total Suspended Solids	mg/l	86	55	34	67	300	360
Oils, Fats & Greases	mg/l	0.62	3	<10	<10	10	12
Surfactants (MBAS)	mg/l	1.8	0.027	2.6	1.7	30	36

\* Condition 4.1.2 (i) For parameters other than pH and temperature, no grab sample value shall exceed 1.2 times the emission limit value.

### 3.3 Groundwater Monitoring

Groundwater monitoring is not specified in the licence, however monitoring is carried out bi-annually at two monitoring wells (BH-1 and BH-3) as agreed with the Agency. BH-1 is off-site and up-gradient in the adjoining closed Waterford City Council Composting facility (W0234-01) and BH-3 is on-site as shown on Figure 3.1.

There are no emission limits or trigger levels set in the licence and so the results are compared to the Interim Guideline Values (IGV) on groundwater quality published by the Agency and the Groundwater Regulations Threshold Value (GTV), which were introduced in 2010 (S.I. 9 of 2010). The IGV represent typical background or unpolluted conditions; however levels higher than the IGV may occur naturally depending on the local geological and hydrogeological conditions. While the GTV are more appropriate for large scale abstraction wells used for potable supply, they can be used to assess the significance of contamination where present in non potable groundwater supplies. Because GTVs have not been established for all of the parameters monitored, the relevant IGV was used for comparative purposes.

The results are shown on Table 3.9 and 3.10 and indicate that there is no evidence that site activities are impacting on groundwater quality.

**Table 3.9** Groundwater Monitoring Results –May 2012

Parameter	Units	BH-1	BH-3	IGV	GTV
BOD	mg/l	<1	<1	-	-
Dissolved Oxygen	mg/l	9	10	-	-
Oils, Fats & Greases	mg/l	<0.01	<0.01	-	-
Total Phosphorus	mg/l	1.36	0.713	-	-
Ammoniacal Nitrogen	mg/l	<0.03	<0.03	0.12	0.175
Conductivity	mS/cm	0.659	0.527	1.000	1.875
DRO	mg/l	<0.01	<0.01	0.01	-
Aliphatic Hydrocarbons	mg/l	<0.01	<0.01	-	-
Undecane	mg/l	<0.01	<0.01	-	-

**Table 3.10** Groundwater Monitoring Results –November 2012

Parameter	Units	BH-1	BH-3	IGV	GTV
BOD	mg/l	<1	<1	-	-
Dissolved Oxygen	mg/l	12	11	-	-
Oils, Fats & Greases	mg/l	<0.01	<0.01	-	-
Total Phosphorus	mg/l	2.658	0.513	-	-
Ammoniacal Nitrogen	mg/l	<0.03	<0.03	0.12	0.175
Conductivity	mS/cm	0.578	0.505	1.000	1.875
DRO	mg/l	<0.01	<0.01	0.01	-
Aliphatic Hydrocarbons	mg/l	<0.01	<0.01	-	-
Undecane	mg/l	<0.01	<0.01	-	-

### 3.4 Noise Monitoring

The annual noise survey was conducted in May 2012. The monitoring locations include three boundary locations (N1 – N3) and two off site noise sensitive locations (NS1 and NS2). The survey was conducted when the site was fully operational and confirmed that noise emissions fully complied with the licence and that the facility is not impacting negatively on the nearest sensitive receptors. A summary of the noise results is shown on Table 3.11.

**Table 3.11** Noise Monitoring Results 2012

Station	Time	LAeq 30 min dB	LAF10 30 min dB	LAF90 30 min dB	Specific level* dB	Noise audible
N1	0806- 0836	74	77	68	74	Onsite emissions continuously dominant due to proximity, in particular local truck movements, and loader operation in nearest building bay. No other noise audible apart from starlings.
N2	0819- 0849	71	76	59	71	Onsite emissions continuously dominant, from various activities, chiefly local truck movements through site gates and weighbridge. Greenstar emissions dominant, except when occasional petrol tools in use outside adjacent commercial premises. Other emissions at this premises also regularly audible.
N3	0840- 0910	62	58	48	62	Greenstar operations continuously audible and dominant, from onsite plant, although significant screening provided by buildings. Local bird calls significant. Road traffic to W continuously audible in background.
NS1	1008- 1038	58	61	46	<46	No Greenstar emissions audible. Noise environment dominated by local and distant traffic, bird song/calls, aircraft and distant dog barking.
NS2	0925- 0955	57	59	49	<49	No emissions audible from Greenstar facility. Noise dominated by construction activity associated with ongoing road works in local area. Intermittent traffic on this road also significant. No other noise audible above road works plant apart from aircraft and local birdsong.

\*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.

### 3.5 Dust Monitoring

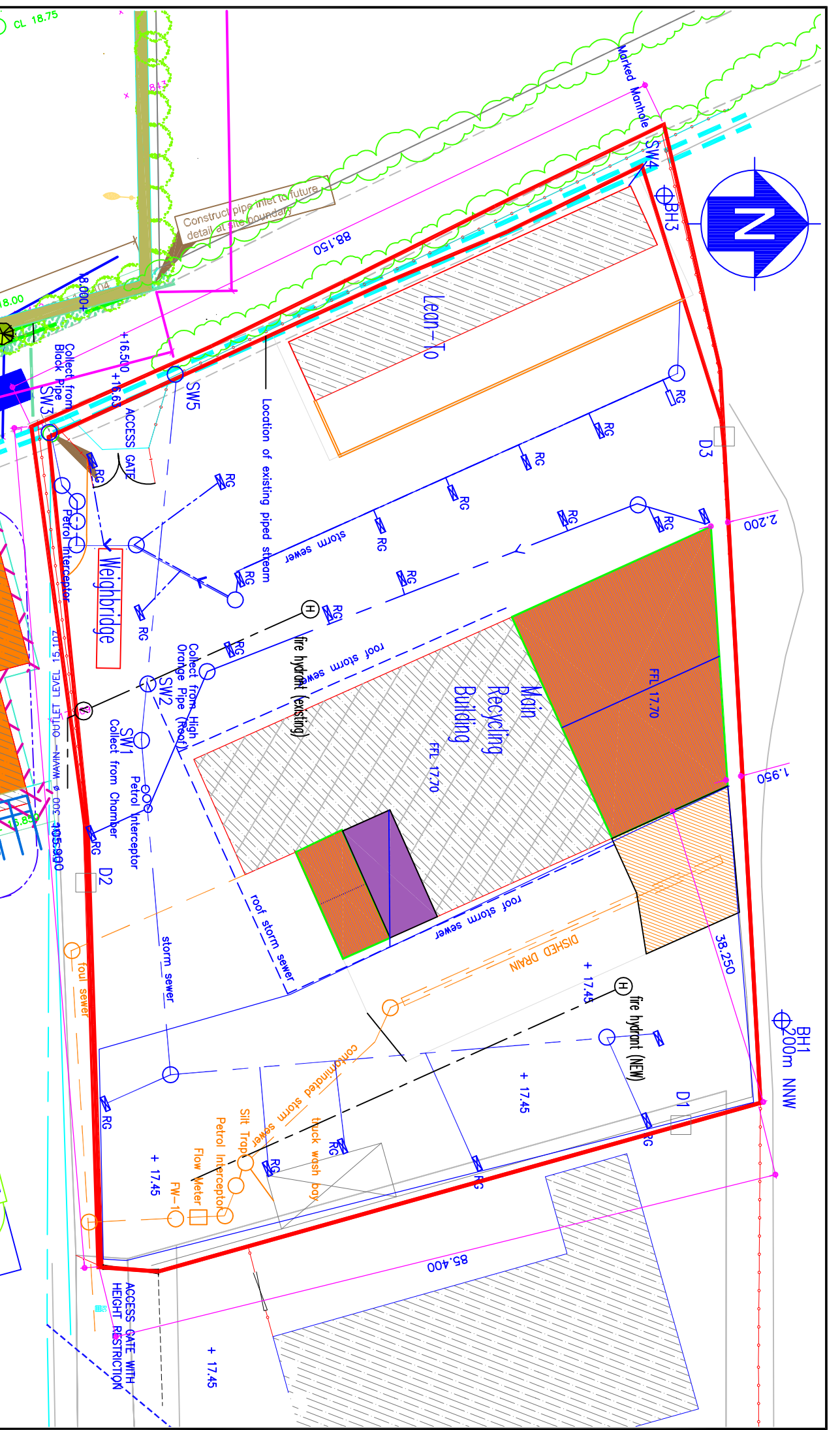
Dust monitoring was carried out on three occasions at three on-site locations (D1, D2 and D3) in July and December 2012 and March 2013. The results of the monitoring are included on Table 3.12. Dust jars had been put up in August but were not sent to the lab due to an oversight.

The dust emission limit (350 mg/m<sup>2</sup>/day) was not exceeded. No complaints relating to dust were received from neighbouring premises during the reporting period.

**Table 3.12** Dust Monitoring Results 2012

<b>Dust Emission (mg/m<sup>2</sup>/day)</b>	<b>July</b>	<b>December</b>	<b>January</b>	<b>Emission Limit</b>
<b>Sample Location</b>	<b>2012</b>	<b>2012</b>	<b>2013</b>	<b>(mg/m<sup>2</sup>/day)</b>
<b>D1</b>	137.5	13.1	24.8	350
<b>D2</b>	110.7	7.2	3.5	350
<b>D3</b>	155.3	*-	45.9	350

\* - Jar broken in transit to laboratory



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

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

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CLIENT	Greenstar Ltd.
TITLE	Monitoring Locations – GES W'ford

details

FIGURE No.	2.1
SCALE	NTS
REV.	A

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## 4. SITE DEVELOPMENT WORKS

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### 4.1 Engineering Works

An assessment of the paved yard areas was carried out in Q4 2011 and resurfacing works were completed in January 2012. The boundary fence was fixed and the netting extended over the summer of 2012. There were no further engineering works planned for 2012 and none were undertaken. There are no engineering works planned for 2013.

### 4.2 Summary of Resource & Energy Consumption

Table 4.1 presents an estimate of the resources used on-site during the reporting period and in 2011.

**Table 4.1 Estimate of Resources Used On-Site in 2011 & 2012**

Resources	Quantities 2011	Quantities 2012
Diesel (green)	60,000 litres	60,602 litres
Electricity	266,900 kWh Units	289,800 kWh Units
Hydraulic Oil	1,100 litres	1,532 litres
AdBlu Diesel Additive	2,200 litres	1,400 litres
Mains Water	310,000 litres	331,000 litres
Odour Neutraliser	350 litres	400 litres

### 4.3 Bund Integrity Testing

Condition 3.11.5 of the licence requires that tank and bund testing be carried out at least once every three years. Integrity testing was carried out in October 2011 and the bunds, interceptors and drainage lines were passed fit for purpose. The reports are retained at the facility for Agency inspection.



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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 2012. 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 54,627.116 tonnes. The total waste consigned was 54,531.762 tonnes. All the wastes consigned went to authorised recovery and disposal facilities approved by the Agency.

**Table 5.1 Waste Received & Consigned 2012**

<b>EWC</b>	<b>Description</b>	<b>Waste In</b>	<b>Waste Out</b>
15 01 01	Segregated cardboard & paper packaging	4,218.533	8,518.94
15 01 02	Segregated plastic packaging	2,196.396	489.827
15 01 03	Segregated wood packaging	8.60	475.08
15 01 04	Segregated metal packaging - aluminium cans	5.46	18.04
15 01 05	Segregated tetrapacks	2.9	
15 01 07	Glass packaging	820.04	770.84
17 05 04	Soil & stone from C&D waste	19.46	
17 08 02	Gypsum-based construction material e.g. Plasterboard	74.3	
17 09 04	Mixed C&D waste	2209.55	2168.78
19 08 05	Liquid Waste	4.2	
19 09 02	Interceptor Sludge	2.68	
19 12 07	Shredded Timber	0.56	276.98
19 12 09	Kitchen and Cateen Waste	8.68	
20 01 01	Paper & cardboard from municipal	1,766.046	715.68
20 01 02	Glass from municipal sources	83.02	76.24
20 01 08	Commercial food waste	1,183.31	909.12
20 01 11	Textile		0.6
20 01 38	Wood waste from municipal sources (e.g. furniture)	1,476.625	739.045
20 01 39	Plastic from municipal sources	115.186	2,010.479
20 01 40	Metals from municipal waste	149.69	162.641
20 02 01	Green Biodegradable Waste		82.28
20 03 01	Mixed residual waste	30,859.624	29,521.99
20 03 03	Street-cleaning residues	1,475.62	1,397.28
20 03 07	Bulky Waste	7,946.632	6,197.92
<b>Total Received</b>		<b>54,627.116</b>	
<b>Total Consigned</b>			<b>54,531.762</b>
<b>Recovery</b>			<b>43,100.65</b>
<b>Disposal</b>			<b>11,431.11</b>
<b>Recovery Rate</b>			<b>79%</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	Ash	17.00	212.15
12 01 02	Metal Dust		22.00
13 05 03	Interceptor sludge	35	
15 01 01	Segregated cardboard & paper packaging	3,842.00	8,369.00
15 01 02	Segregated plastic packaging	1,943.00	638.00
15 01 03	Segregated wood packaging	13.00	1130
15 01 04	Segregated metal packaging - aluminium cans	14.00	45
15 01 05	Segregated tetrapacks	2.00	
15 01 06	Segregated mixed packaging	9,736.00	4,494.00
15 01 07	Glass packaging	1052	1,125.00
17 01 01	Concrete from C&D waste	4.00	
17 05 04	Soil & stone from C&D waste	42.00	
17 08 02	Gypsum-based construction material e.g. Plasterboard	3,422.00	3,320.00
17 09 04	Mixed C&D waste	2,135.00	2,371.00
19 12 07	Shredded Timber		664.00
19 12 12	C&I Dry Mixed		6,583.00
19 12 12	MSW Mixed Municipal		23,301.00
20 01 01	Paper & cardboard from municipal	2,408.00	1,040.00
20 01 02	Glass from municipal sources	174.00	28.00
20 01 08	Commercial food waste	384.00	407.00
20 01 11	Textile		1.00
20 01 35*	WEEE	10.00	
20 01 38	Wood waste from municipal sources (e.g. furniture)	1,571.00	35.00
20 01 39	Plastic from municipal sources	97.00	1,647.00
20 01 40	Metals from municipal waste	188	232.00
20 01 41	Ash	161.00	
20 03 01	Mixed residual waste	21,486.00	
20 03 01	Mixed dry recyclables	8,598.00	
20 03 03	Street-cleaning residues	258.00	1,213.00
20 03 07	Bulky Waste		1,354.00
<b>Total Received</b>		<b>57,592.00</b>	
<b>Total Consigned</b>			<b>58,231.15</b>

**Table 5.3 Waste Received & Consigned**

	<b>2011</b>	<b>2010</b>	<b>2009</b>	<b>2008</b>
<b>Total Received</b>	57,592.00	49,011	48,560	52,055
<b>Total Consigned</b>	58,231.15	48,120.34	47,574	52,212
<b>Total Recovered</b>		25,706.16	20,892	20,113
<b>Total Disposed</b>		22,414.18	26,682	32,099
<b>Recovery Rate</b>		53.42%	43.92%	38.52%

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

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### **6.1 Incidents**

The routine monitoring identified an exceedence of the ELV for detergents from the foul water discharge in the first quarter. The Agency was informed of the incident. Subsequent to that the Agency agreed to suspend reporting of the exceedence of the ELV for detergents based on an assessment of a Technical Amendment. In February 2013 the Agency awarded a new technical amendment. The detergent value in the first quarter is considerably below the new limit. There were no other exceedences in the monitoring programme.

The reported incident is not considered to have caused any significant impacts or impairment of the environment.

### **6.2 Register of Complaints**

GES maintains a register of complaints received at the facility offices. No complaints were received during the reporting period.

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## 7. ENVIRONMENTAL DEVELOPMENT & CONTROL

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### 7.1 Environmental Management Programme Report

GES 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 account the requirements of the Waste Licence Conditions. GES has prepared and effectively implement documented procedures and instructions in accordance with the requirements of both the OHSAS 18001:2007 and ISO 14001:2004.

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. An index of procedures used at the facility is included in Appendix 2.

#### 7.1.1 Site Management Structure

Management and Staffing structure: -

**Name:** Aidan Shanahan

**Responsibility:** General Manager, South East

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

**Name:** Tom Walsh

**Responsibility:** Operations Manager

**Experience:** Over 11 years experience waste management experience; has completed the FÁS waste management course.

**Name:** Ivan Cummins

**Responsibility:** Yard Supervisor

**Experience:** 28 years experience waste management experience.

### *7.1.2 Staff Training*

Staff training carried out during the year included mainly safety training as well as forklift training, 360 excavator training, manual handling, reversing training and CPC training. Environmental awareness and Collection Permit training was undertaken by all collection staff in September 2012. Details on staff training are retained on the company's electronic Training Management System (TMS).

## **7.2 Environmental Management Programme**

### *7.2.1 Schedule of Objectives 2012*

The objectives achieved during this reporting period are outlined in Table 7.1.

### *7.2.2 Schedule of Objectives 2013*

The schedule of targets and objectives for 2013 are presented in Table 7.2.

## **7.3 Communications Programme**

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

To this end GES has drawn up a Communications Programme, which details how members of the public are facilitated in accessing and viewing environmental information at the facility. Members of the public who wish to inspect these files may do so at any reasonable time by making an appointment with the Operations Manager using the telephone number posted on the main facility entrance sign.

## **7.4 Report Financial Provision**

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

The facility has an Integrated Management System (IMS) in place and the site has achieved external accreditation for its implementation of ISO 14001 and OHSAS 18001, environmental and health and safety management systems. Effective implementation of these systems is the most appropriate way to ensure that mitigation measures achieve the required risk reduction on site. The IMS serves as a guidance document for facility staff and describes operational control and management practices that are applied at the facility. The IMS is designed to ensure

that management of site activities complies with regulatory requirements and best practice. The IMS includes a detailed Emergency Response Procedure which sets out the steps to be taken in the event of an incident at the facility with the potential to cause environmental damage. Greenstar also implements a comprehensive monitoring programme which will highlight any potential environmental incidents with the potential to cause environmental damage.

## **7.5 Nuisance Controls**

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

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

Under the European Pollutant Release and Transfer Register Regulation (EC) No. 166/2006 GES are required to submit information annually to the Agency. A copy of the information submitted to the Agency via the web-based data reporting system is included in Appendix 1.

## **7.7 Wastewater Volumes**

The volume of wastewater generated during the reporting period was estimated to be 520 m<sup>3</sup>. A total of 9.68 tonnes of oil interceptor waste and sludge was transported off site in 2012.

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

<b>No</b>	<b>Objective</b>	<b>Target</b>	<b>Responsibility</b>	<b>Status</b>
<b>1</b>	<b>Awareness and Training</b>	Continue to ensure that appropriate training is carried out specific to all site personnel as per the Company's established Training Matrix.	Site Management	Ongoing
<b>2</b>	<b>Energy &amp; Resource Consumption</b>	Continue to summarise energy and resource usage on a quarterly basis with a view to reducing consumption	Site Management	Quarterly
<b>3</b>	<b>Review and Assess the Effectiveness of Nuisance Control Procedures</b>	Continually review and assess all nuisance control procedures to ensure minimal impact on the surrounding area.	Site Management	Ongoing
<b>4</b>	<b>Pollution Prevention</b>	Strive to ensure that monitoring results comply with the licence limits and investigate any exceedances of emission limit values.	Site Management	Ongoing
<b>5</b>	<b>Infrastructure</b>	Repair Boundary Fence	Site Management	May 2012



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

<b>No</b>	<b>Objective</b>	<b>Target</b>	<b>Timescale</b>	<b>Responsibility</b>
<b>1</b>	<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.	Q1-Q4 2013	Site Management
<b>2</b>	<b>Energy &amp; Resource Consumption</b>	Continue to summarise energy and resource usage on a quarterly basis with a view to reducing consumption	Q1-Q4 2013	Site Management
<b>3</b>	<b>Review and Assess the Effectiveness of Nuisance Control Procedures</b>	Continually review and assess all nuisance control procedures to minimise impact on the surrounding area.	Q1-Q4 2013	Site Management
<b>4</b>	<b>Pollution Prevention</b>	Strive to ensure that emissions comply with the licence limits and investigate any exceedances of emission limit values.	Q1-Q4 2013	Site Management
<b>5</b>	<b>Environmental Monitoring</b>	Continue to review the surface water monitoring results to ensure they do not increase. Propose revised trigger levels for ammonia and conductivity for surface water monitoring	Q1-Q4 2013	Site Management
<b>5</b>	<b>Waste Storage</b>	Review waste wood processing & storage practices taking account of the recent Agency Position Paper on the Management of Wood Waste	Q2 2013	Site Management
<b>6</b>	<b>Odour Management</b>	Compile an Odour Management Plan for the facility and include it on the training matrix referred to in Objective 1	Q2 2013	Site Management
<b>7</b>	<b>Financial Provision</b>	Propose to complete an Environmental Liability Risk Assessment and Decommissioning Plan.	Q1-Q4 2013	Site Management

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## **8. OTHER REPORTS**

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No other reports were specified by the Agency.

# **APPENDIX 1**

## European Pollutant Release and Transfer Register



| PRTR# : W0177 | Facility Name : Greenstar Environmental Services Limited | Filename : W0177\_2012.xls | Return Year : 2012 |

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

### Waste or IPPC Classes of Activity

No.	class_name
3.12	Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.11	Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.13	Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.
4.13	Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.
4.2	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).
4.3	Recycling or reclamation of metals and metal compounds.
4.4	Recycling or reclamation of other inorganic materials.
Address 1	Carrignard
Address 2	Six Cross Roads
Address 3	Business Park
Address 4	Waterford City
	Waterford
Country	Ireland
Coordinates of Location	-7.14684 52.2345
River Basin District	IESE
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
<b>AER Returns Contact Name</b>	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>	10
<b>User Feedback/Comments</b>	
<b>Web Address</b>	

## 2. PRTR CLASS ACTIVITIES

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

## 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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4.1 RELEASES TO AIR

[Link to previous years emissions data](#)

| PRTR# : W0177 | Facility Name : Greenstar Environmental Services Limited | Filename : W0177\_2012.xls | Return Year : 2012 |

05/04/2013 13:11

**SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS**

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

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

**SECTION B : REMAINING PRTR POLLUTANTS**

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

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

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

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

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

**Additional Data Requested from Landfill operators**

For the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide summary data on landfill gas (Methane) flared or utilised on their facilities to accompany the figures for total methane generated. Operators should only report their Net methane (CH4) emission to the environment under T(total) KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:

Landfill:

Greenstar Environmental Services Limited

Please enter summary data on the quantities of methane flared and / or utilised

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

4.2 RELEASES TO WATERS

[Link to previous years emissions data](#)

| PRTR# : W0177 | Facility Name : Greenstar Environmental Services Limited | Filename : W0177\_2012.xls | Return Year : 2012 |

05/04/2013 13:12

**SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS**

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

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

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

**SECTION B : REMAINING PRTR POLLUTANTS**

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

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

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

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

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

4.3 RELEASES TO WASTEWATER OR SEWER

[Link to previous years emissions data](#)

| PRTR# : W0177 | Facility Name : Greenstar Environmental Services Limited | Filename : WC 05/04/2013 13:12

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	Emission Point 2	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	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				
303	BOD	C	PER	Calculated using flow to sewer over the year. Analysis is ISO accredited	95.41	95.41	0.0	0.0
306	COD	C	PER	Calculated using flow to sewer over the year. Analysis is ISO accredited	187.01	187.01	0.0	0.0
240	Suspended Solids	C	PER	Calculated using flow to sewer over the year. Analysis is ISO accredited	20.025	20.025	0.0	0.0
314	Fats, Oils and Greases	C	PER	Calculated using flow to sewer over the year. Analysis is ISO accredited	0.59911	0.59911	0.0	0.0
308	Detergents (as MBAS)	C	PER	Calculated using flow to sewer over the year. Analysis is ISO accredited	0.507	0.507	0.0	0.0

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

4.4 RELEASES TO LAND

[Link to previous years emissions data](#)

| PRTR# : W0177 | Facility Name : Greenstar Environmental Services Limited | Filename : W0177\_2012.xls | Return Year : 2012 |

05/04/2013 13:12

SECTION A : PRTR POLLUTANTS

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

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

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

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

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



5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

| PRTR# : W0177 | Facility Name : Greenstar Environmental Services Limited | Filename : W0177\_2012.xls | Return Year : 2012 |

05/04/2013 13:13

Please enter all quantities on this sheet in Tonnes

0

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 : Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used		Non	Non Haz Waste: Address of Recover/Disposer			
Within the Country	15 01 01	No	645.1	paper and cardboard packaging	R13	M	Weighed	Offsite in Ireland	Mark Lydon Enterprises Ltd,IRE/G021/12		.....,Ireland		
To Other Countries	15 01 01	No	698.28	paper and cardboard packaging	R13	M	Weighed	Abroad	Huhtamaki,IRE/AG032/11		.....,ireland		
To Other Countries	15 01 01	No	1427.84	paper and cardboard packaging	R13	M	Weighed	Abroad	MLM (ACN Europe) Ltd ,TFS Broker IRE/G022/11		.....,United Kingdom		
To Other Countries	15 01 01	No	256.12	paper and cardboard packaging	R13	M	Weighed	Abroad	Materia Environmental Ltd.,IRE/AG161/11		House,Scilly,Kinsale,Co. Cork,Ireland		
Within the Country	15 01 01	No	175.42	paper and cardboard packaging	R13	M	Weighed	Offsite in Ireland	Irish Packaging Recycling Ltd (Panda) ,W0263-01		Ballymount Rd ,Walkinstown ,Dublin 12 ,.,ireland		
Within the Country	15 01 01	No	682.5	paper and cardboard packaging	R13	M	Weighed	Offsite in Ireland	Marwin Environmental,926		7 Glyntown Heights ,Glanmire,Co. Cork,.,Ireland		
To Other Countries	15 01 01	No	202.76	paper and cardboard packaging	R13	M	Weighed	Abroad	International Recycling Ltd.,IRE/G050/08		Heath House,5 Woogate Court,Norwich,NR2 4AP,United Kingdom		
To Other Countries	15 01 01	No	4430.92	paper and cardboard packaging	R13	M	Weighed	Abroad	Cellmark USA,IRE/G180/11		200 Tamal Plaza,California,..,95245,United States		
To Other Countries	15 01 02	No	44.58	plastic packaging	R13	M	Weighed	Abroad	Choice Waste Management,IRE/AG050/11		Denmark House,Brick Close Kiln Farm,Milton Keynes Buckinghamshire,MK11 3DP,United Kingdom		
To Other Countries	15 01 02	No	86.66	plastic packaging	R13	M	Weighed	Abroad	J & A Young ,TFS Broker IRE/G058/11		.....,United Kingdom		
To Other Countries	15 01 02	No	34.18	plastic packaging	R13	M	Weighed	Abroad	Peute Papier Recycling BV,IRE/G006/08		Veeplaat 40,3313 LJ Dordrecht,.,.,Netherlands		
Within the Country	15 01 02	No	126.667	plastic packaging	R13	M	Weighed	Offsite in Ireland	Leinster Environmentals,WP 2008/06		Park,Haggardstown,Dundalk, Co. Louth,Ireland		
Within the Country	15 01 02	No	13.38	plastic packaging	R13	M	Weighed	Offsite in Ireland	Agnail ,TFS Broker IRE/AG117/11		....,Ballycoolin,Dublin,Ireland		
To Other Countries	15 01 02	No	16.82	plastic packaging	R13	M	Weighed	Abroad	Cellmark USA,IRE/G180/11		200 Tamal Plaza,California,..,95245,United States		
Within the Country	15 01 02	No	167.54	plastic packaging	R13	M	Weighed	Offsite in Ireland	Materia Environmental Ltd.,IRE/AG161/11		House,Scilly,Kinsale,Co. Cork,Ireland		
Within the Country	15 01 03	No	431.92	wooden packaging	R13	M	Weighed	Offsite in Ireland	Clonmel Waste Disposal Ltd ,WP-008-02		Lawlesstown ,Clonmel ,Co Tipperary ,.,ireland		
Within the Country	15 01 03	No	43.16	wooden packaging	R13	M	Weighed	Offsite in Ireland	Molloy Waste Services to Clonmel Waste Disposal Ltd ,WP-008-02		Lawlesstown , Clonmel ,Co Tipperary ,.,ireland		
Within the Country	15 01 04	No	18.04	metallic packaging	R13	M	Weighed	Offsite in Ireland	Molloy Metals,WP08/14b		Ballycarney,Enniscorthy,Co. Wexford,.,Ireland		
Within the Country	15 01 07	No	770.84	glass packaging mixed construction and demolition wastes other than those mentioned in 17 09 01, 17	R13	M	Weighed	Offsite in Ireland	Urban & Rural Recycling Ltd (broker) to Glassco ,WFP-KE-08-0957-01		Naas ,Co Kildare ,.,.,ireland		
Within the Country	17 09 04	No	2168.78	09 02 and 17 09 03	R13	M	Weighed	Offsite in Ireland	CHI Environmental Ltd ,WMP 023/2007		Grannagh ,Kilmacow ,Co Kilkenny ,.,ireland		
Within the Country	19 12 07	No	276.98	wood other than that mentioned in 19 12 06	R13	M	Weighed	Offsite in Ireland	OD Recycling,WFP-TS-10-0002-01		Kilsheelin,Co. Tipperary,.,.,Ireland		
Within the Country	20 01 01	No	26.44	paper and cardboard	R13	M	Weighed	Offsite in Ireland	Boost International,TFS IRE/G082/11		.....,Ireland		

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Haz Waste: Name and Licence/Permit No of Recoverer/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recoverer/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
To Other Countries	20 01 01	No	75.8	paper and cardboard	R13	M	Weighed	Abroad	Cellmark USA,IRE/G180/11 Clonmel Waste Disposal Ltd	200 Tamal Plaza,California,..,95245,United States		
Within the Country	20 01 02	No	48.48	glass	R13	M	Weighed	Offsite in Ireland	WP-008-02 Ormonde Environmental,Not Required	Lawlesstown ,Clonmel ,Co Tipperary ,,,ireland		
Within the Country	20 01 08	No	574.2	biodegradable kitchen and canteen waste	R13	M	Weighed	Offsite in Ireland	Ballyshannon Recycling Ltd.,WFP-WX-10-0009-01	Waterford,..,Ireland		
Within the Country	20 01 08	No	7.72	biodegradable kitchen and canteen waste	R13	M	Weighed	Offsite in Ireland	Textile Recycling Ltd ,Licence exempt	Wexford,..,Ireland		
Within the Country	20 01 11	No	0.6	textiles	R13	M	Weighed	Offsite in Ireland	Clonmel Waste Disposal Ltd ,WP-008-02	Glen Abbey Complex ,Belgard ,Tallaght , Dublin 24 ,ireland		
Within the Country	20 01 38	No	739.045	wood other than that mentioned in 20 01 37	R13	M	Weighed	Offsite in Ireland		Lawlesstown ,Clonmel ,Co Tipperary ,,,ireland		
To Other Countries	20 01 39	No	663.23	plastics	R13	M	Weighed	Abroad	Choice Waste Management,IRE/AG050/11	Denmark House,Brick Close Kiln Farm,Milton Keynes Buckinghamshire,MK11 3DP,United Kingdom		
Within the Country	20 01 39	No	46.409	plastics	R13	M	Weighed	Offsite in Ireland	Leinster Environmentals,WP 2008/06	Park,Haggardstown,Dundalk, Co. Louth,Ireland		
Within the Country	20 01 39	No	807.84	plastics	R13	M	Weighed	Offsite in Ireland	Agnail ,TFS Broker IRE/AG117/11	,,,Ballycoolin,Dublin,Ireland		
Within the Country	20 01 39	No	493.0	plastics	R13	M	Weighed	Offsite in Ireland	Materia Environmental Ltd.,IRE/AG161/11	The Kipper House,Scilly,Kinsale,Co. Cork,Ireland		
Within the Country	20 01 40	No	126.501	metals	R13	M	Weighed	Offsite in Ireland	Molloy Metals,WP08/14b	Ballycarney,Enniscorthy,Co. Wexford,..,Ireland		
Within the Country	20 01 40	No	26.98	metals	R13	M	Weighed	Offsite in Ireland	Davis Recycling Ltd,W0134-01	10 The Anchorage Business Park,Charlotte Quay,Dublin 4,..,Ireland		
Within the Country	20 03 03	No	526.68	street-cleaning residues	D5	M	Weighed	Offsite in Ireland	Bord Na Mona,W0201-01	Drehid Landfill,Drehid ,Naas,Co. Kildare,Ireland		
Within the Country	20 03 03	No	739.74	street-cleaning residues	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd.,W0146-01	Knockharley Landfill,Kentstown,Co. Meath,..,Ireland		
Within the Country	20 03 03	No	21.9	street-cleaning residues	R13	M	Weighed	Offsite in Ireland	Greenstar Ltd , W0053-03	Bray Depot ,Fassaroe ,Bray Co Wicklow,..,ireland		
Within the Country	20 03 07	No	5007.57	bulky waste	R13	M	Weighed	Offsite in Ireland	Greenstar Limited,W0183-01	Millennium Business Park,Grange,Ballycoolin,Dubl in 11 ,Ireland		
Within the Country	20 03 07	No	24.52	bulky waste	D5	M	Weighed	Offsite in Ireland	Bord Na Mona,W0201-01	Drehid Landfill,Drehid ,Naas,Co. Kildare,Ireland		
Within the Country	20 03 01	No	6506.6	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Bord Na Mona,W0201-01	Drehid Landfill,Drehid ,Naas,Co. Kildare,Ireland		
Within the Country	20 03 07	No	947.81	bulky waste	R13	M	Weighed	Offsite in Ireland	Clonmel Waste Disposal Ltd ,WP-008-02	Lawlesstown ,Clonmel ,Co Tipperary ,,,ireland		
Within the Country	20 03 01	No	991.44	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Killarney Waste Disposal ,W0217-01	Aughacurreen,Killarney ,Co. Kerry,..,Ireland		
Within the Country	20 03 07	No	109.08	bulky waste	R13	M	Weighed	Offsite in Ireland	Molloy Waste Services to Clonmel Waste Disposal Ltd ,WP-008-02	Lawlesstown , Clonmel ,Co Tipperary ,,,ireland		
Within the Country	20 02 01	No	84.08	biodegradable waste	R13	M	Weighed	Offsite in Ireland	Ormonde Environmental,Not Required	Portlaw,Co.		
Within the Country	20 03 01	No	5.9	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Waterford County Council,W0189-01	Waterford,..,Ireland		
Within the Country	20 03 01	No	66.63	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Wexford Co Co , W0191-01	Holmestown Landfill ,Co Wexford,..,ireland		

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility	Haz Waste : Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility	Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used		Non	Non Haz Waste: Address of Recover/Disposer				
Within the Country	20 03 01	No	1456.88	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd.,W0146-01		Knockharley Landfill,Kentstown,Co. Meath,,Ireland			
Within the Country	20 03 07	No	108.94	bulky waste	R13	M	Weighed	Offsite in Ireland	Greenstar Ltd , W0053-03		Bray Depot ,Fassaroe ,Bray Co Wicklow,,Ireland			
Within the Country	20 03 01	No	14757.04	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Greenstar Ltd , W0053-03		Bray Depot ,Fassaroe ,Bray Co Wicklow,,Ireland			
Within the Country	20 03 01	No	20.88	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Bailey Waste Recycling,WFP-FG-08-0002-01		Road,Blanchardstown ,Dublin 16 ,Ireland			
Within the Country	20 01 01	No	511.1	paper and cardboard	R13	M	Weighed	Offsite in Ireland	Bailey Waste Recycling,WFP-FG-08-0002-01		Road,Blanchardstown ,Dublin 16 ,Ireland			
Within the Country	20 03 01	No	1995.2	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Limited, W0178-02		,,Ballinasloe, Co. Galway ,Ireland			
Within the Country	20 03 03	No	108.96	street-cleaning residues	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Limited, W0178-02		,,Ballinasloe, Co. Galway ,Ireland			
To Other Countries	20 01 01	No	75.72	paper and cardboard	R13	M	Weighed	Abroad	MLM (ACN Europe) Ltd ,TFS Broker IRE/G022/11		,,,,,United Kingdom			
Within the Country	20 03 01	No	21.68	mixed municipal waste	R1	M	Weighed	Offsite in Ireland	Indaver IWMF ,W0167-02		Meath ,,Ireland			
To Other Countries	20 01 01	No	26.62	paper and cardboard	R13	M	Weighed	Abroad	Peute Papier Recycling BV,IRE/G006/08		Veeplaat 40,3313 LJ Dordrecht,,,,Netherlands			
Within the Country	20 03 01	No	3285.26	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Oxigen Environmental Ltd.,W0152-03		Road,Ballymount,Dublin 22,Ireland			
Within the Country	20 01 08	No	80.24	biodegradable kitchen and canteen waste	R13	M	Weighed	Offsite in Ireland	Waddock Composting,WP 01/02 & WP 11/04		Killimaster,Co Carlow,,,,Ireland			
Within the Country	20 01 08	No	246.96	biodegradable kitchen and canteen waste	R13	M	Weighed	Offsite in Ireland	Anglo Beef Processers t/a Waterford Proteins,P0040-02		Christendom,Ferrybank,Wate rford,-,Ireland			
Within the Country	20 01 02	No	27.76	glass	R13	M	Weighed	Offsite in Ireland	Urban & Rural Recycling Ltd (broker) to Glassco ,WFP-KE-08-0957-01		Naas ,Co Kildare ,,,Ireland			
Within the Country	20 03 01	No	414.18	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Quality Recycling Ltd.,WFP-TS-08-0079-01		Ballylynch,Carrick-on-Suir,Co. Tipperary,,Ireland			
Within the Country	20 01 40	No	9.16	metals	R13	M	Weighed	Offsite in Ireland	Multi Metals,WFP-WW-09-0014-01		Blessington,Co. Wicklow,,,,Ireland			

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

# **APPENDIX 2**

## Procedures List



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

**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



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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>

<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



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

**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