



**ANNUAL ENVIRONMENTAL REPORT**  
**FOR GREENSTAR LTD**  
**GREENOGUE MATERIALS RECOVERY FACILITY**  
**LICENCE NO. W0188-01**  
**JANUARY 2012 – DECEMBER 2012**

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

Project	Annual Environmental Report 2012			
Client	Greenstar Ltd. W0188-01			
Report No	Date	Status	Prepared By	Reviewed By
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**APPENDIX 1**                      European Pollutant Release and Transfer Register

**APPENDIX 2**                      Procedures List

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# 1. INTRODUCTION

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This is the 2012 Annual Environmental Report (AER) for the Greenstar Ltd. (Greenstar), Materials Recovery & Transfer facility (MRF) at Site 14B, Phase 3, Road 3A, Greenogue Industrial Estate, Rathcoole, County Dublin. It covers the period from the 1<sup>st</sup> January 2012 to the 31<sup>st</sup> December 2012.

The content is based on Schedule B of the Waste Licence (Reg. No. W0188-01) and the report format follows guidelines set in the “Guidance Note for Annual Environmental Report” issued by the Environmental Protection Agency (Agency)<sup>1</sup>. Account is also taken of the AER Draft Guidance Document and AER Information Templates issued by the Agency in January 2013<sup>2</sup>.

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 EPA (Environmental Protection Agency) 1999 Waste Licensing – Draft Guidance on Environmental Management Systems and Reporting to the Agency

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

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## **2. SITE DESCRIPTION**

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### **2.1 Site Location & Layout**

The site, which encompasses an area of 0.603 ha, is located within the Greenogue Industrial Estate, Rathcoole, Co Dublin. The facility comprises one waste transfer building and ancillary infrastructure, including administration offices, weighbridge, vehicle wash and paved open yard areas.

### **2.2 Waste Management Activities**

The licence allows Greenstar to accept and process up to 95,000 tonnes of waste per annum consisting of non-hazardous Commercial & Industrial (C&I), Construction and Demolition (C&D) and Household waste. All waste processing takes place inside the waste transfer building as specified in Condition 5.1 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: -

- Household (15,000 tonnes),
- Commercial (37,500 tonnes),
- Industrial (5,000 tonnes),
- Construction & Demolition (37,500 tonnes).

The maximum tonnage of each waste type accepted, may be altered with the prior agreement of the Agency as long as the total maximum tonnage is not exceeded.

The key processes carried out at the facility include: -

- Segregation of C&I into different waste streams (paper, cardboard, glass, metal, green waste and wood) for further recovery at an appropriate facility
- Segregation of C&D into clean & dirty waste streams for further recovery purposes

- Bulking up of domestic wastes (mixed municipal waste & dry mixed recyclables) for further recovery or disposal at an appropriate off-site facility.

### *Household Waste*

Residual or black bin waste delivered in refuse collection vehicles is transferred to large bulk transporters and is then sent to an appropriate licensed landfill. Greenstar also provides a skip hire service to private individuals. All skips arriving at the facility are netted or covered. Recyclable material is segregated, where possible, from the waste and transferred off-site to suitable licensed or permitted recycling facilities. The remaining non-recyclable and residual material is sent to licensed landfills post processing.

### *Commercial and Industrial Waste*

Greenstar provides skips of various sizes to a wide range of commercial and industrial premises. Recyclable material (paper, cardboard, glass, metal, green waste and wood) is segregated, where possible, from the waste stream and transferred to suitable recycling facilities. The remaining non-recyclable and residual material is sent to licensed landfills. Biodegradable wastes suitable for composting which is accepted at the facility are sent to an offsite composting facility.

### *Construction and Demolition Waste*

Construction and demolition material arrives on-site in skips of varying sizes. The loads are inspected and segregated on-site. Recoverable materials are extracted and sent off-site either for re-use or recycling. The non-recyclable materials are transferred to a licensed landfill.

### *2.2.2 Plant List*

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

**Table 2.1 Existing Plant**

<b>No.</b>	<b>Plant</b>	<b>Model</b>	<b>Operational Capacity</b>
1	Loading Shovel	Volvo	70t/hr
1	Fork Lift	Toyota	60 hr/wk
1	Grab	Liebherr 360	60t/hr
1	Weighbridge – 2 scales	Avery Berkel	56hr wk

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### **3. EMISSION MONITORING**

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Greenstar implements a comprehensive environmental monitoring programme to assess the significance of emissions from site activities. The programme includes surface water, wastewater, noise and dust monitoring. The monitoring locations are shown on Figure 3.1 and 3.2. The results are reported to the Agency at quarterly intervals. An overview of the monitoring results is presented in this Section, with summary data included.

#### **3.1 Surface Water Monitoring**

Surface water run-off is confined to run-off from the roofed area of the waste transfer building and run-off from the paved yards and is completely dependant on rainfall. Prior to discharge the surface water is treated by a Class 1 petrol/oil interceptor which is maintained regularly throughout the year.

The sampling and analysis was carried out in accordance with recognised quality assurance and control procedures. The range of analysis included Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), suspended solids (TSS), pH, electrical conductivity, mineral oils, total nitrogen and total ammonia. The results are presented in Table 3.1, which includes the trigger levels and Emission Limit Values (ELVs) set in the licence. The routine monitoring results confirm 100% compliance with the ELVs.

The Agency collected a surface water sample in December 2012 the results are presented in Table 3.1. The BOD (39mg/l) exceeded the Emission Limit Value (ELV) of 25mg/l; however the EPA Report stated that the BOD results were included as a “guide only” due to a Quality Control failure. The Total Suspended Solids (TSS) (215mg/l) also exceeded the ELV of 35mg/l. A submission on these results was made to the Agency. It is believed that there was no evident flow in the system at the time of sampling.

The ammonia levels were elevated during the reporting period and because of this Greenstar have reviewed the surface water drainage arrangements at the facility. A proposal for the diversion of a portion of the surface water infrastructure to the municipal foul sewer was originally submitted to the Agency in December 2011 and approval was granted in March 2012 to carry out these works subject to the agreement of South Dublin County Council (SDCC). A revised proposal was submitted in response to an Agency inspection from November 2012. It is expected that these diversion works will be carried out in 2013.

**Table 3.1** Surface Water Monitoring Results 2012

Parameter	Units	Q1	Q2	Q3	Q4	Agency Results December 2012	Trigger Levels	Emission Limit
pH	pH units	8.24	7.00	7.98	8.33	7.6	N/A	N/A
Temperature	°C	10.1	8.1	10.8	8.2	-	N/A	N/A
Conductivity	mS/cm	0.541	0.579	0.368	0.472	0.856	N/A	N/A
Total Ammonia	mg/l	4.29	2.3	18.17	0.98	6.9	N/A	N/A
BOD	mg/l	8	23	<1	2	39	25	N/A
COD	mg/l	44	110	<7	17	202	N/A	N/A
Total Suspended Solids	mg/l	<10	31	NDP	<10	215	35	N/A
Total Nitrogen	mg/l	22.3	10.4	6.4	<0.5	10.2	N/A	N/A
Mineral Oils	mg/l	<0.01	0.49	<0.01	<0.01	-	N/A	5

### 3.2 Wastewater Monitoring

Waste water is generated from vehicle washing at the facility and from the floor of the MRF building. The wash water is directed to a silt trap and then to a petrol/oil interceptor before discharging to the municipal foul sewer.

The sampling and analysis was carried out in accordance with recognised quality assurance and control procedures. The range of analysis included BOD, COD, suspended solids, pH, ammoniacal nitrogen, sulphate, fats, oils and greases and detergents. The samples were compared to the ELVs set in the licence. The results, which are presented in Table 3.2, confirmed 100% compliance with the ELVs.

South Dublin County Council (SDCC) carried out waste water monitoring on 25/07/2012 and again on the 20/09/2012. The results are presented in Table 3.2. The Council issued Greenstar with a notification of non-compliance in relation to the levels of COD, Total Suspended Solids and Extractable fats in correspondence dated 14/08/2012 in respect of the monitoring undertaken on 25/07/2012. The Council issued Greenstar with a further notification of non-compliance in relation to the levels of Suspended Solids in correspondence dated 03/10/2012 in respect of the monitoring undertaken on 20/09/2012. On both occasions Greenstar has queried the validity of these results and expressed concerns over the methodology used when samples are taken by the Council at the facility. The results from the Council's sampling and analysis are completely at odds with sampling results that have been routinely carried out for a number of years under condition of the waste licence. Under the waste licence, Greenstar is required to monitor discharge to sewer on a bi-monthly basis. A review of all Licence required monitoring since 2007 was undertaken and indicates no recorded cases throughout that period whereby parameters analysed on behalf of Greenstar (BOD, Suspended Solids or any other parameters) have exceeded the emission limit values



(over 65 sampling events). For this reason Greenstar retains reservations concerning the quality of sampling and analysis undertaken by the Council.

Notwithstanding this, Greenstar will re-design the foul water sampling point to ensure that sediment is not disturbed when sampling occurs and will liaise further with the Council during 2013.

As stated, all waste water monitoring carried out in accordance with Licence requirements was 100% compliant during 2012.

**Table 3.2** Wastewater Monitoring Results 2012

Parameter	Units	Jan	April	June	Aug	Oct	Dec	SDCC Results (25/07/2012)	SDCC Results (20/09/2012)
pH	pH units	6.85	6.96	8.06	8.01	7.29	8.12	-	
Temperature	°C	10.1	9.4	11.8	10.3	8.9	8.8	-	
Sulphate	mg/l	19.93	76.90	13.7	<0.05	63.7	<0.05	-	
BOD	mg/l	666	863	605	710	19	23	-	
COD	mg/l	1,203	1,606	981	1,100	53	466	14,085	
Total Suspended Solids	mg/l	134	292	121	116	74	89	13,880	4,236
Oils, Fats & Greases	mg/l	<0.01	<0.01	<0.01	<0.01	<1	<0.01	-	
Ammoniacal Nitrogen	mg/l	18.75	15.68	13.08	46.23	1.25	1.5	-	
Detergents (as MBAS)	mg/l	<0.2	6.0	9.3	8.3	0.10	1.5	-	

### 3.3 Noise Survey

The annual noise survey was conducted on the 21<sup>st</sup> May 2012 at three on-site, N-1, N-2 and N-3 one off-site noise sensitive location, NSL-1. The ELV specified in the licence (55 dB (A)) LA<sub>eq</sub> (30 minutes)) relates only to NSL-1.

The survey was conducted when the site was fully operational and the results confirmed that the facility was in full compliance with its licence requirements. Noise emissions from the facility were not audible above at the nearest noise sensitive location. The results are included on Table 3.3.

**Table 3.3** Noise Monitoring Results 2012

Station	Time	L <sub>Aeq 30</sub> min dB	L <sub>AF10 30</sub> min dB	L <sub>AF90 30</sub> min dB	Specific level* dB	Noise audible
N1	0850- 0920	52	54	40	52	Emissions from various onsite sources audible almost continuously, variously from truck movements, grab, loader, metal grinding and bird scarer. Offsite noise audible from surrounding commercial premises, industrial estate roadway traffic, and aircraft. Local bird calls.
N2	0817- 0847	67	70	62	67	Onsite emissions dominant, particularly loading idling at 10 m throughout entire interval. Grab in building throughout most of interval also significant. Truck movements around yard dominant when present. Continuous air handling system emissions audible. No other noise audible apart from bird scarer device 0842-0843.
N3	0814- 0844	56	59	52	56	Onsite emissions dominant, particularly grab loading truck in building throughout most of interval. Idling loader and truck movements also significant. Air handling system continuously audible at low level. Bird scarer device 0842-0843. No offsite emissions audible.
NSL1	0934- 1004	58	61	34	<34	No Greenstar emissions audible. No emissions audible from industrial estate in general. Intermittent local traffic dominant when present. N7 traffic continuously slightly audible to S. Bird song/calls and aircraft. No aircraft activity at adjacent aerodrome.

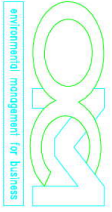
\*Specific level: Sound pressure level contribution considered attributable to facility, determined using real time assessment, field notes, time history profiles, statistical analysis, frequency spectra, near field correction if applicable, and other parameters.

### 3.4 Dust Monitoring

Dust monitoring was carried out on three occasions at four on-site locations (DS-01, DS-02, DS-03 and DS-04) in May – June, June – July and November 2012. The results of the monitoring are included on Table 3.4. There was 100% compliance with the dust deposition limit set in the licence (350 mg/m<sup>2</sup>/day).

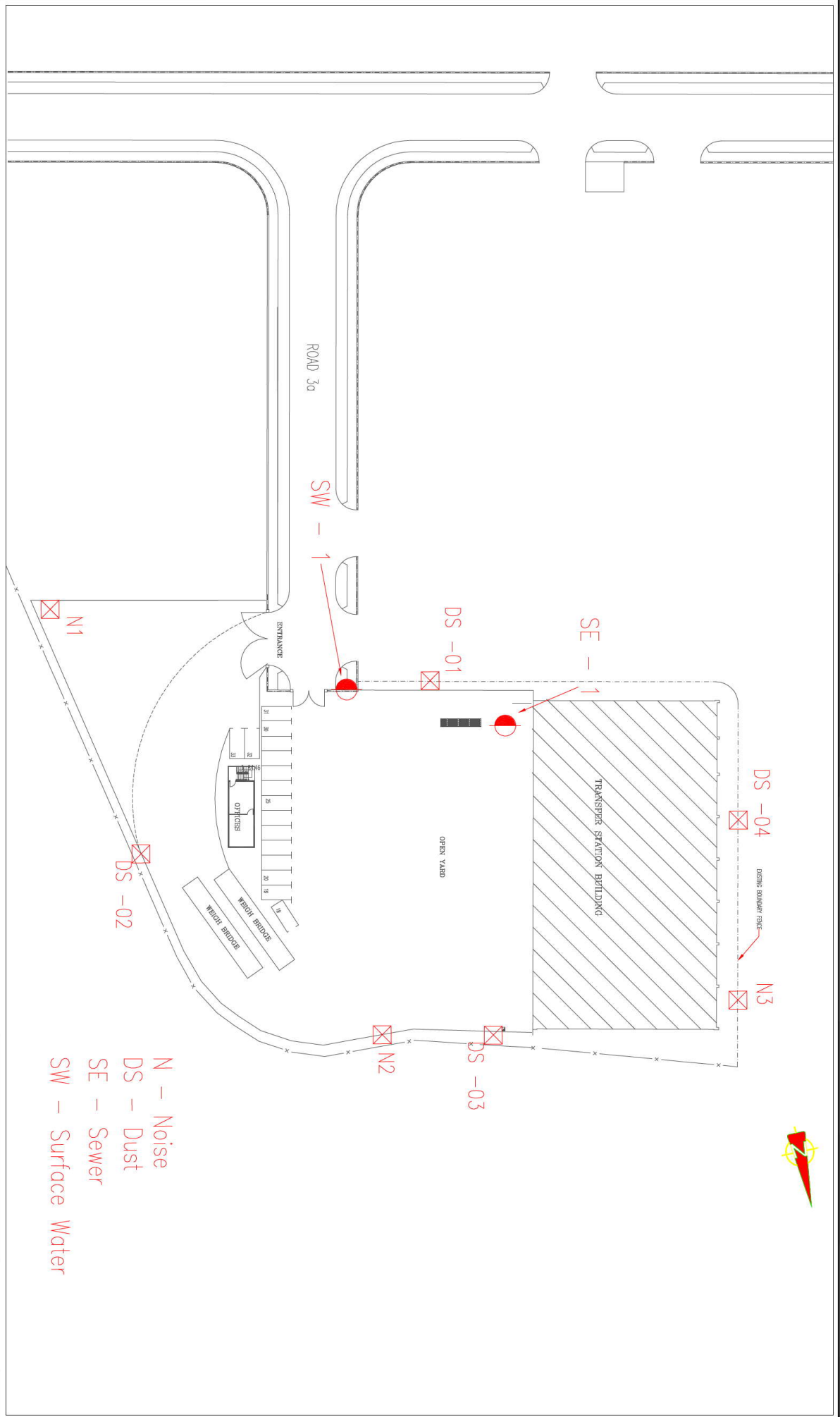
**Table 3.4** Dust Monitoring Results 2012

<b>Location</b>	<b>May – June mg/m<sup>2</sup>/day</b>	<b>June - July mg/m<sup>2</sup>/day</b>	<b>November mg/m<sup>2</sup>/day</b>	<b>Dust Deposition Limit mg/m<sup>2</sup>/day</b>
DS-01	15.4	6.8	41.8	350
DS-02	22.2	27.5	50.2	350
DS-03	22.9	11.9	54.3	350
DS-04	11.1	13.6	82.7	350



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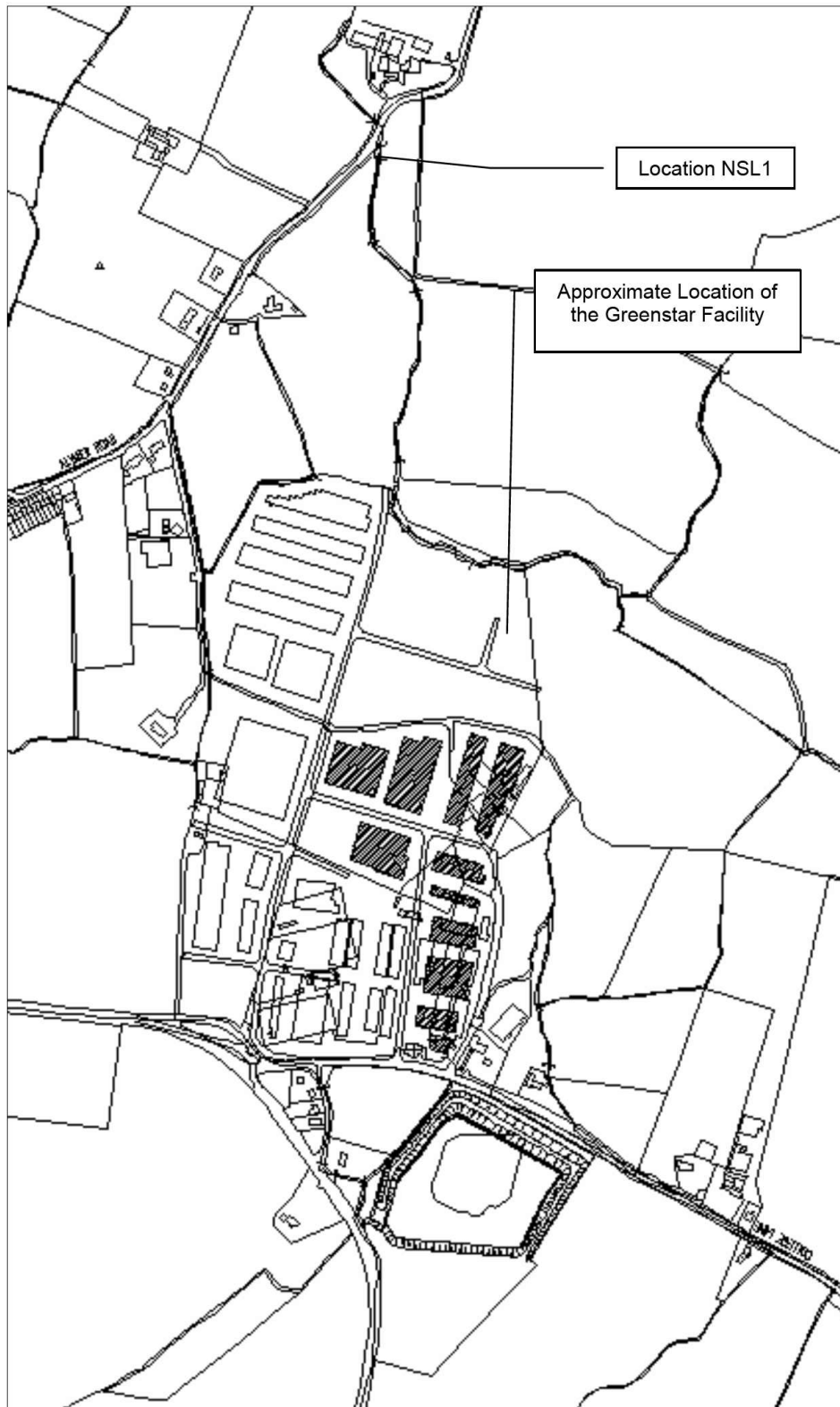
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N – Noise  
DS – Dust  
SE – Sewer  
SW – Surface Water

CLIENT		DRAWING No.		NOTES	
GREENSTAR GREENOGUE		3.1		Grid References:	
TITLE		SCALE	REV.	N1: E302169, N227977	
Monitoring Locations		NTS		N2: E302316, N228041	
		A3		N3: E302318, N228122	
				SW-1: E302213, N228058	
				SE-1: E302251, N228101	
				DS-01: E302217, N228086	
				DS-02: E302237, N227986	
				DS-03: E302323, N228072	
				DS-04: E302269, N228137	

Figure 3.2 – Noise Sensitive Location



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## 4. SITE DEVELOPMENT WORKS

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### 4.1 Specified Engineering Works

No Specified Engineering Works (SEW) were carried out during the reporting period.

### 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

Resources	Quantities 2011	Quantities 2012
Water	7,951 litres	7,500 litres
Diesel	65,000 litres	49,719 litres
Truck Wash	55 litres	350 litres
Engine Oil	300 Litres	550 litres
Electricity	7,951 kWh	7,000 kWh

### 4.3 Tank & Pipeline Integrity Testing

Condition 3.11.8 of the licence requires tank, drum, pipeline and bund testing to be carried out every three years. This testing was carried out in 2009 and confirmed the integrity of the infrastructure was fit for purpose. Testing of bunds is scheduled to occur in Quarter 1 2013. In addition, contractors have been commissioned and will inspect and report on the integrity of the pipe-line infrastructure. Both the bund testing and pipeline integrity are included in the objectives and targets register as part of the Environmental Management Programme (EMP) for 2013.

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

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

The total quantity of waste received was 68,373 tonnes and the total amount consigned was 67,770 tonnes. For comparative purposes the amounts of waste received and consigned from 2004 to 2011 are presented in Table 5.2 and Table 5.3. As per Condition 5.8 of the Licence all the wastes consigned from the site went to authorised recovery and disposal facilities and a copy of the relevant Facility Permit or Waste Licences retained on site for Agency inspection.

The records show that more waste was received at the site than consigned from. The difference was 603 tonnes. The difference is due to waste which remained on site at the end of 2012 which will be consigned in 2013.

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

**Table 5.1** Waste Received & Consigned 2012

<b>EWC</b>	<b>Description</b>	<b>Waste In</b>	<b>Waste Out</b>
11 01 10	LDF filter cake	35.38	-
13 05 03	Interceptor sludge	-	11.78
15 01 01	Paper and cardboard	2,828.24	3,026.46
15 01 02	Plastic Packaging	86.97	30
15 01 03	Wooden Packaging	241.09	1,109.60
15 01 04	Segregated metal packaging - steel cans	1.58	-
15 01 05	Segregated tetrapacks	1.36	-
15 01 07	Segregated glass packaging (e.g. bottles, jars)	14.02	-
16 05 04	Gas Cylinders	-	0.34
17 05 04	Soil & Stones	4.35	669.90
17 09 04	C&D Inert Mixed	2,311.21	2,121.30
19 09 02	Filter cake	11,658.18	11,391.44
19 12 10	SRF	80.54	-
19 12 12	Mixed municipal waste (Lights)	-	607.38
20 01 01	Paper and cardboard	8.48	24.04
20 01 02	Glass from municipal sources	1.46	-
20 01 08	Biodegradable kitchen and canteen waste	6,460.78	5,301.40
20 01 11	Textiles	15.08	-
20 01 21	Fluorescent tubes	0.25	-
20 01 33	Batteries	0.8	1.28
20 01 35	WEE	0.08	-
20 01 38	wood	1,097.47	475.22
20 01 39	Plastics	36.9	23.16
20 01 40	Metal	302.11	380.00
20 02 01	Green Waste	1,011.16	844.88
20 03 01	Mixed residual waste	29,484.80	31,512.67
20 03 07	Bulky Wastes	12,690.82	10,239.28
<b>Total Received</b>		<b>68,373.11</b>	
<b>Total Consigned</b>			<b>67,770.13</b>
<b>Recovery</b>			<b>35,717.5</b>
<b>Disposal</b>			<b>32,052.63</b>
<b>Recovery Rate</b>			<b>52.7%</b>



**Table 5.2** Waste Received & Consigned in 2011

<b>EWC</b>	<b>Description</b>	<b>Waste In</b>	<b>Waste Out</b>
13 05 03	Interceptor sludge	20	40.00
15 01 01	Paper and cardboard	2,863.00	3854.88
15 01 02	Plastic Packaging	118.00	59.00
15 01 03	Wooden Packaging	297.00	1,805.00
15 01 04	Segregated metal packaging - steel cans	3.00	-
15 01 05	Segregated tetrapacks	1.00	-
15 01 06	Mixed Packaging	5,463.00	4,284.00
15 01 07	Segregated glass packaging (e.g. bottles, jars)	17.00	-
16 01 03	Tyres	3.00	4.00
16 05 04*	Gas Cylinders	-	1.00
17 01 01	Concrete slabs	-	14.00
17 04 11	Cables from C&D waste not containing dangerous substances	1.00	-
17 05 04	Soil & Stones	81.00	1,871.00
17 08 02	Plasterboard	190.00	118.00
17 09 04	C&D Inert Mixed	3,568.00	2535.36
19 09 02	Filter cake	1,910.00	1858
19 12 12	Mixed municipal waste (Lights)	2.00	28641.26
20 01 01	Paper and cardboard	35.00	41.00
20 01 02	Glass from municipal sources	2.00	-
20 01 08	Biodegradable kitchen and canteen waste	9,372.00	8,192.00
20 01 38	wood	1,523.00	337.00
20 01 39	Plastics	12.00	1.00
20 01 40	Metal	411	576.00
20 02 01	Green Waste	985.00	980.00
20 03 07	Bulky waste	12,470.00	11,700.00
20 01 33*	Hazardous Batteries		1.00
20 03 01	Mixed residual waste	27,756.00	-
20 03 01	Mixed dry recyclables	96.00	-
<b>Total Received</b>		<b>67,199</b>	
<b>Total Consigned</b>			<b>66,913.50</b>

**Table 5.3** Previous Waste Consignments

<b>Description</b>	<b>Total Received</b>	<b>Total Consigned</b>
2011	67,199	66,913.50
2010	50,563.40	49,686.56
2009	52,472.47	52,051.49
2008	68,661.96	66,758.24
2007	63,481.24	60,776.28
2006	51,767.97	51,175.53
2005	1,540.48	1,400.66
2004	461.27	411.8

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

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### **6.1 Incidents**

There were no reportable incidents in 2012.

### **6.2 Register of Complaints**

Greenstar maintains a register of complaints received in accordance with Condition 10.4 of the waste licence. An anonymous odour complaint was received via the Agency on 2<sup>nd</sup> March 2012. Greenstar management carried out an immediate investigation but there had been nothing received in the site or loaded that could explain the odour. It was determined that operations at the facility were not unusual at the time of the complaint in terms of waste loads entering or leaving the facility and the odour suppression unit, installed in July 2011, was working as normal. PCP, the odour suppression system specialists retained by the facility were on-site in mid-April to carry out regular maintenance. A copy of the complaint and response are retained on site.

No further complaints were received after March 2012.

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## 7. ENVIRONMENTAL DEVELOPMENT

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### 7.1 Environmental Management Programme Report

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

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

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

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

#### *7.1.1 Site Management Structure*

Management and Staffing structure: -

**Name:** James Sowray

**Responsibility:** Operations Manager; overall responsibility for the day to day site operations of the site including environmental compliance

**Experience:** 12 years working in operations management; has completed the FÁS Management Course

**Name:** Jonathon O’Keeffe (Nominated Deputy)

**Responsibility:** Dispatch Manager

**Experience:** 10 years working in waste management; has completed the FÁS Management Course

### *7.1.2 Staff Training*

Environmental awareness training was carried out on site in 2012. Tool box talks were carried out as required in 2012.

## **7.2 Environmental Management Programme Progress Report & Proposal**

### *7.2.1 Schedule of Objectives 2012 –Progress Report*

The objectives that were achieved during this reporting period are outlined in Table 7.1 and the progress summarised below.

#### **Objective 1 – Awareness and Training**

Environmental Awareness Training was carried out in May 2012 as part of ISO 14001 requirements.

#### **Objective 2 – Energy & Resource Consumption**

Energy consumption is reviewed quarterly as part of Environmental management System (ISO 14001). Information gathered during 2012 and over future reporting periods will be compiled and reviewed with the aim of reducing energy & resource consumption.

#### **Objective 3 – Review and Assess the Effectiveness of Nuisance Control Procedures**

Nuisance controls were ongoing. Greenstar remain in close contact with Casement Aerodrome as well as Greenogue Business Park Management to make sure that the site is not causing any nuisance. The nuisance control procedures are effective as evidenced by the level of complaints received. The procedures are regularly audited both internally and externally.

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

The routine environmental monitoring has confirmed that the facility is not causing pollution in the local environment.

#### **Objective 5 – Surface Water Drainage**

A section of the yard was not diverted in 2012, but agreement has been reached with the Agency and South Dublin County Council and it is scheduled for 2013. There were a number of other small changes put in place to help improve surface water quality run off. These included cleaning the gullies more frequently and changes were made to the bin washing procedure.

**Table 7.1** Schedule of Objective and Targets 2012

<b>No</b>	<b>Objective</b>	<b>Target</b>	<b>Responsibility</b>	<b>Timescale</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.	<b>Site Management</b>	<b>Complete</b>
<b>2</b>	<b>Energy &amp; Resource Consumption</b>	Summarise energy and resource usage on a quarterly basis with a view to reducing consumption	<b>Site Management</b>	<b>Ongoing</b>
<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.	<b>Site Management</b>	<b>Complete</b>
<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.	<b>Site Management</b>	<b>Complete</b>
<b>5</b>	<b>Surface water drainage</b>	Divert section of yard run off to foul water system, in order to improve surface water discharge quality	<b>Site Management</b>	<b>Not Completed in 2012</b>

7.2.2 *Schedule of Objectives 2013 – Proposal*

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

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

No	Objective	Target	Responsibility	Timescale
1	<b>Environmental Liabilities</b>	Commission the completion of an ELRA in 2013	<b>Site Management</b>	Q3
2	<b>Pollution Prevention</b>	Strive to ensure that monitoring results comply with the licence limits and investigate any exceedances of emission limit values.	<b>Site Management</b>	Q1-Q4
3	<b>Surface water drainage</b>	Divert section of yard run off to foul water system, in order to improve surface water discharge quality	<b>Site Management</b>	Q2
4	<b>Traffic Management</b>	Continue to improve on traffic management within the facility.	<b>Site Management</b>	Q1-Q4
5	<b>Odour Management</b>	Compile an Odour Management Plan for the facility and include it on the IMS training matrix	<b>Site Management</b>	Q3
6	<b>Waste Storage</b>	Review waste wood processing & storage practices taking account of the recent Agency Position Paper on the Management of Wood Waste	<b>Site Management</b>	Q2
7	<b>Bund Testing</b>	Ensure Bund testing is carried out on all bunds employed on site	<b>Site Management</b>	Q1-Q2
8	<b>Pipe work Integrity Testing</b>	Appoint a suitably qualified contractor to perform an integrity test of the pipe-work onsite including both storm water and foul lines	<b>Site Management</b>	Q1-Q2
9	<b>Maintain EMS to ISO:14001 Standard</b>	Through a series of scheduled audits or an audit programme throughout the year develop and maintain the current IS)14001 Certification Standard	<b>Site Management</b>	Q1-Q4
10	<b>Environmental Liabilities</b>	Commission the completion of an ELRA in 2013	<b>Site Management</b>	Q3

### **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, Health & Safety Policy makes a specific commitment to make the policy and records available to the public and interested parties. To this end Greenstar has drawn up a Communications Programme, which details how members of the public are facilitated in accessing environmental information at the facility.

Records available for public inspection on site include:-

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

Opening Times for Inspection of Records are from 9 am – 4 pm.

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

### **7.4 Nuisance Controls**

Greenstar has contracted a vermin control company Rentokil to carry out nuisance control at the facility. Rentokil assess vermin activity on-site, along with an inspection of the bait traps that are located throughout the facility. Records are maintained onsite.

Greenstar implemented additional bird control measures in 2012. A speaker system is in operation at the facility as is a bird repellent kite which is situated on the boundary fence, a second repellent kite was sourced and introduced into the bird control programme in Quarter 2 2012. These measures have proved effective during this reporting period in keeping the numbers of birds at the site to a minimum.

Greenstar installed an odour suppression system in 2011 and the system has been working efficiently since installed.



## **7.5 Waste Recovery Report**

The facility is designed to increase the recycling of biodegradable materials and reduce the volume of waste disposed to landfill. Of the 68,373 tonnes of waste accepted approximately 52.7% was sent for recovery.

## **7.6 Report Financial Provision**

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

It is an objective of Greenstar in 2013 to arrange for a revised comprehensive and fully costed Environmental Liability Risk Assessment (ELRA). The ELRA shall have particular regard for accidents and emergencies and shall include costs relating to closure and decommissioning of the facility.

## **7.7 Wastewater Volume Produced and Transported Off-Site**

Wastewater (truck wash and MRF floor) is directed to a silt trap and then to a petrol/oil interceptor before discharging to the municipal sewer. It is estimated that approximately 3,000 m<sup>3</sup> of wastewater was discharged to the sewer during the reporting period. During the year 12 tonnes of waste was also removed from the facility following the cleaning out of the interceptors on site.

## **7.8 European Pollutant Release and Transfer Register**

A copy of the EPRTR return submitted to the Agency via the web-based data reporting system is included in Appendix 1.

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## **8. OTHER REPORTS**

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No other reports were requested by the Agency during the reporting period.

# **APPENDIX 1**

## European Pollutant Release and Transfer Register



[Guidance to completing the PRTR workbook](#)

# AER Returns Workbook

Version 1.1.15

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

Parent Company Name	Greenstar Limited
Facility Name	Greenstar Ltd (Greenogue)
PRTR Identification Number	W0188
Licence Number	W0188-01

### 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.
4.12	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	14B Phase 3
Address 2	Road 3A
Address 3	Greenogue Industrial Estate
Address 4	Rathcoole, Co Dublin
	Dublin
Country	Ireland
Coordinates of Location	-6.46619 53.2936
River Basin District	IEEA
NACE Code	3832
Main Economic Activity	Recovery of sorted materials
<b>AER Returns Contact Name</b>	Malcolm Dowling
<b>AER Returns Contact Email Address</b>	malcolm.dowling@greenstar.ie
<b>AER Returns Contact Position</b>	Group Compliance Manager
<b>AER Returns Contact Telephone Number</b>	012947976
<b>AER Returns Contact Mobile Phone Number</b>	
<b>AER Returns Contact Fax Number</b>	
<b>Production Volume</b>	0.0
<b>Production Volume Units</b>	
<b>Number of Installations</b>	0
<b>Number of Operating Hours in Year</b>	0
<b>Number of Employees</b>	8
<b>User Feedback/Comments</b>	
<b>Web Address</b>	

## 2. PRTR CLASS ACTIVITIES

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

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

Is it applicable?	
Have you been granted an exemption ?	
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

## 4. WASTE IMPORTED/ACCEPTED ONTO SITE

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

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

4.1 RELEASES TO AIR

[Link to previous years emissions data](#)

| PRTR#: W0188 | Facility Name : Greenstar Ltd (Greenogue) | Filename : W0188\_2012.xls | Return Year: 2012 |

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SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

POLLUTANT		RELEASES TO AIR			Please enter all quantities in this section in KGs			
No. Annex II	Name	M/C/E	Method Code	Method Used 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		RELEASES TO AIR			Please enter all quantities in this section in KGs			
No. Annex II	Name	M/C/E	Method Code	Method Used 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		RELEASES TO AIR			Please enter all quantities in this section in KGs			
Pollutant No.	Name	M/C/E	Method Code	Method Used 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 report their Net methane (CH4) emission to the environment under 'Total' KG/yr for Section A. Sector specific PRTR pollutants above. Please complete the table below:

Landfill: Greenstar Ltd (Greenogue)

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

	M/C/E	Method Used		Facility Total Capacity m3 per hour
		Method Code	Designation or Description	
T (Total) kg/Year				
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#: W0188 | Facility Name : Greenstar Ltd (Greenogue) | Filename : W0188\_2012.xls | Return Year: 2012 |

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**SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS** **Data on ambient monitoring of storm surface water or groundwater, conducted as part of your licence requirements, should NOT be submitted under AER / PRTR Reporting as this only covers**

POLLUTANT	RELEASES TO WATERS		Please enter all quantities in this section in KGs					
	No. Annex II	Name	M/C/E	Method Code	Method Used 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 PRTR POLLUTANTS**

POLLUTANT	RELEASES TO WATERS		Please enter all quantities in this section in KGs					
	No. Annex II	Name	M/C/E	Method Code	Method Used 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 C : REMAINING POLLUTANT EMISSIONS (as required in your Licence)**

POLLUTANT	RELEASES TO WATERS		Please enter all quantities in this section in KGs					
	Pollutant No.	Name	M/C/E	Method Code	Method Used 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

4.3 RELEASES TO WASTEWATER OR SEWER

[Link to previous years emissions data](#)

| PPRTR: W0188 | Facility Name : Greenstar Ltd (Greenogun) | (Filename : W0188\_2012.xls | Return )

28/02/2013 14:25

SECTION A : PRTR POLLUTANTS

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER		METHOD		Please enter all quantities in this section in Kgs			
No. Annex II	Name	M/C/E	Method Code	Designation or Description	QUANTITY		
					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)

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER		METHOD		Please enter all quantities in this section in Kgs			
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	QUANTITY		
					T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
238	Ammonia (as N)	C	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited	32.16	32.16	0.0
303	BOD	C	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited	962.0	962.0	0.0
306	COD	C	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited	1803.0	1803.0	0.0
308	Detergents (as MBAS)	C	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited	10.08	10.08	0.0
314	Fats, Oils and Greases	C	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited	0.0	0.0	0.0
343	Sulphate	C	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited	87.1	87.1	0.0
240	Suspended Solids	C	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited	275.3	275.3	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# : W0188 | Facility Name : Greenstar Ltd (Greenogue) | Filename : W0188\_2012.xls | Return Year : 2012 ]

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SECTION A : PRTR POLLUTANTS

POLLUTANT		RELEASES TO LAND		METHOD		QUANTITY	
No. Annex II	Name	M/C/E	Method Used <a href="#">Method Code</a>	Designation or Description	Emission Point 1	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		RELEASES TO LAND		METHOD		QUANTITY	
Pollutant No.	Name	M/C/E	Method Used <a href="#">Method Code</a>	Designation or Description	Emission Point 1	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



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 Next Dest./ Haz. Waste Name and Licence/Permit No of Receiver/Disposer	Haz. Waste : Name and No. / Haz. Waste Name and Licence/Permit No of Receiver/Disposer	Haz. Waste : Address of Next Destination Facility / Non-Haz. Waste : Address of Receiver/Disposer	Name and Licence / Permit No. and Address of Final Receiver/ Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used						
Within the Country	13 05 03	Yes	11.76	interceptor sludges	R13	M	Weighted	Offsite in Ireland	Rita Environmental Ltd ,W0192-03 Greenogue Business Park, Raticooile Co. Dublin, Ireland	Greenogue Business Park, Raticooile Co. Dublin, Ireland	Horizon Environmental, CPD 277-2, Unit 26 Collinstown Cross Industrial Estate, Old Airport Road, Cloghnan, Co. Dublin, Ireland	Unit 26 Collinstown Cross Industrial Estate, Old Airport Road, Cloghnan, Co. Dublin, Ireland	
Within the Country	15 01 01	No	2650.66	paper and cardboard packaging	R13	M	Weighted	Offsite in Ireland	Greenstar Ltd, W0053-03 Bally Waste Recycling (Greenstar Ltd), WPT-FG-08-0002-01	Greenstar Ltd, W0053-03 Bally Waste Recycling, Wicklow, Ireland	Bray Depot, Fassaroe, Bray, Co. Wicklow, Ireland	Bray Depot, Fassaroe, Bray, Co. Wicklow, Ireland	
Within the Country	15 01 01	No	231.8	paper and cardboard packaging	R13	M	Weighted	Offsite in Ireland	Rebox Recycling, CP D9571 CKN HOLDINGS LTD T/A CK	Rosemount, Ballycoolin, Dublin 11, Ireland	Unit 26 Kylemore Industrial Estate, Killen Road, Ballyfermot, Dublin 10, Ireland	Unit 26 Kylemore Industrial Estate, Killen Road, Ballyfermot, Dublin 10, Ireland	
Within the Country	15 01 01	No	144.0	paper and cardboard packaging	R13	M	Weighted	Offsite in Ireland	POLYMERS, CBEE5351GK, Unit 5 Binbrook Technical Park, Brookenby Market Rasen, Lincolnshire, United Kingdom, LNS 6HF, United Kingdom	Unit 5 Binbrook Technical Park, Brookenby Market Rasen, Lincolnshire, United Kingdom, LNS 6HF, United Kingdom	Johnston Bridge, Enfield, Co. Meath, Ireland	Meath, Ireland	
To Other Countries	15 01 02	No	18.04	plastic packaging	R13	M	Weighted	Abroad	Max Palet Services Ltd, Licence - exempt	Max Palet Services Ltd, Licence - exempt	Johnston Bridge, Enfield, Co. Meath, Ireland	Meath, Ireland	
Within the Country	15 01 03	No	26.05	wooden packaging	R3	M	Weighted	Offsite in Ireland	Greenstar Ltd, W0053-03 BOC Gases, P0051-02, Bluebell IE, Dublin 12, Ireland	Greenstar Ltd, W0053-03 BOC Gases, P0051-02, Bluebell IE, Dublin 12, Ireland	Bluebell IE, Dublin 12, Ireland	Bluebell IE, Dublin 12, Ireland	
Within the Country	15 01 03	No	1083.52	wooden packaging	R13	M	Weighted	Offsite in Ireland	Greenstar Ltd, W0053-03 BOC Gases, P0051-02, Bluebell IE, Dublin 12, Ireland	Greenstar Ltd, W0053-03 BOC Gases, P0051-02, Bluebell IE, Dublin 12, Ireland	Bluebell IE, Dublin 12, Ireland	Bluebell IE, Dublin 12, Ireland	
Within the Country	15 05 04	Yes	0.34	gases in pressure containers (including flasks) containing dangerous substances	R4	M	Weighted	Offsite in Ireland	Greenstar Ltd, W0053-03 BOC Gases, P0051-02, Bluebell IE, Dublin 12, Ireland	Greenstar Ltd, W0053-03 BOC Gases, P0051-02, Bluebell IE, Dublin 12, Ireland	Bluebell IE, Dublin 12, Ireland	Bluebell IE, Dublin 12, Ireland	
Within the Country	17 05 04	No	689.9	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	R5	M	Weighted	Offsite in Ireland	Greenstar Ltd, W0053-03 BOC Gases, P0051-02, Bluebell IE, Dublin 12, Ireland	Greenstar Ltd, W0053-03 BOC Gases, P0051-02, Bluebell IE, Dublin 12, Ireland	Bluebell IE, Dublin 12, Ireland	Bluebell IE, Dublin 12, Ireland	
Within the Country	17 09 04	No	2121.3	other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	R5	M	Weighted	Offsite in Ireland	Greenstar Ltd, W0053-03 BOC Gases, P0051-02, Bluebell IE, Dublin 12, Ireland	Greenstar Ltd, W0053-03 BOC Gases, P0051-02, Bluebell IE, Dublin 12, Ireland	Bluebell IE, Dublin 12, Ireland	Bluebell IE, Dublin 12, Ireland	
Within the Country	19 09 02	No	6230.48	sludges from water clarification	D5	M	Weighted	Offsite in Ireland	Greenstar Holdings Ltd, W0165-01	Greenstar Holdings Ltd, W0165-01	Calor Gas, Not Required, Long Mile Road, Dublin 12, Ireland	Long Mile Road, Dublin 12, Ireland	
Within the Country	19 09 02	No	5160.96	sludges from water clarification	D5	M	Weighted	Offsite in Ireland	Greenstar Holdings Ltd, W0165-02	Greenstar Holdings Ltd, W0165-02	Calor Gas, Not Required, Long Mile Road, Dublin 12, Ireland	Long Mile Road, Dublin 12, Ireland	
Within the Country	19 12 12	No	12.1	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R13	M	Weighted	Offsite in Ireland	Greenstar Ltd, W0053-03	Greenstar Ltd, W0053-03	Bray Depot, Fassaroe, Bray, Co. Wicklow, Ireland	Bray Depot, Fassaroe, Bray, Co. Wicklow, Ireland	
Within the Country	19 12 12	No	12.46	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R13	M	Weighted	Offsite in Ireland	Greenstar Ltd, W0053-03	Greenstar Ltd, W0053-03	Bray Depot, Fassaroe, Bray, Co. Wicklow, Ireland	Bray Depot, Fassaroe, Bray, Co. Wicklow, Ireland	
Within the Country	19 12 12	No	44.34	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R13	M	Weighted	Offsite in Ireland	Greenstar Holdings Ltd, W0165-01	Greenstar Holdings Ltd, W0165-01	Millennium Park, Ballycoolin, Dublin 11, Ireland	Millennium Park, Ballycoolin, Dublin 11, Ireland	
Within the Country	19 12 12	No	515.7	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R13	M	Weighted	Offsite in Ireland	Greenstar Holdings Ltd, W0165-01	Greenstar Holdings Ltd, W0165-01	Millennium Park, Ballycoolin, Dublin 11, Ireland	Millennium Park, Ballycoolin, Dublin 11, 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	R13	M	Weighted	Offsite in Ireland	Greestar Holdings Ltd,W0183-01	Millennium Park,Ballycoolin, Dublin 11, ,Ireland	
Within the Country	20 01 01	No	24,04 paper and cardboard	R3	M	Weighted	Offsite in Ireland	Greenstar Ltd,W0053-03	Depot,Fasstaroe,Bray,Co Wicklow,Ireland	
Within the Country	20 01 08	No	608.56 biodegradable kitchen and canteen waste	R3	M	Weighted	Offsite in Ireland	Bord Na Mona PLC,W0201-03	Dreih Landfill,Dreihid ,Co. Kildare,,Ireland	
Within the Country	20 01 08	No	1979.72 biodegradable kitchen and canteen waste	R3	M	Weighted	Offsite in Ireland	Troie Composting,W01/07	Balmrains,Co. Carlow,,Ireland	
Within the Country	20 01 08	No	2713.12 biodegradable kitchen and canteen waste batteries and accumulators included in 16.06 01, 16.06 02 or 16.06 03 and unsorted batteries and accumulators containing these	R3	M	Weighted	Offsite in Ireland	Waddock Composting,W/P 11/04	Killasseragh,Co. Carlow,,Ireland	
Within the Country	20 01 33	Yes	1.28 batteries	R4	M	Weighted	Offsite in Ireland	Multi Metals Recycling Ltd,WFP-WW-09-0014-01	Blessington,Co Wicklow,, ,Ireland	Blessington,Co Wicklow,, ,Ireland
Within the Country	20 01 38	No	475.22 wood other than that mentioned in 20 01 37	R3	M	Weighted	Offsite in Ireland	Greenstar Ltd,W0053-03	Depot,Fasstaroe,Bray,Co Wicklow,Ireland	
To Other Countries	20 01 39	No	11.96 plastics	R3	M	Weighted	Abroad	CKN HOLDINGS LTD T/A POLYMERS,DC25943,Unit 5		
Within the Country	20 01 39	No	11.197 plastics	R3	M	Weighted	Offsite in Ireland	Binbrook Technical Park,Brooknby Market Rasen,Lincolnshire, United Kingdom,LN8 6HF,united kingdom		
Within the Country	20 01 40	No	176.32 metals	R4	M	Weighted	Offsite in Ireland	WM Ltd ,WFP-LH-09-0004-01,Dundak,Louth,, ,Ireland	Dundak,Louth,, ,Ireland	
Within the Country	20 01 40	No	201.68 metals	R4	M	Weighted	Offsite in Ireland	Davle Recycling Ltd,W0134-01	10 The Anchorage Business Park,Charlotte Clay,Dublin 5,,Ireland	
Within the Country	20 02 01	No	33.08 biodegradable waste	R3	M	Weighted	Offsite in Ireland	Multi Metals Recycling Ltd,WFP-WW-09-0014-01	Wicklow,, ,Ireland	
Within the Country	20 02 01	No	321.26 biodegradable waste	R3	M	Weighted	Offsite in Ireland	Greenstar Ltd,W0053-03	Fasstaroe,Bray,Co Wicklow,Ireland	
Within the Country	20 02 01	No	490.54 biodegradable waste	R3	M	Weighted	Offsite in Ireland	Bord Na Mona PLC,W0201-03	Dreih Landfill,Dreihid ,Co. Kildare,, ,Ireland	
Within the Country	20 03 01	No	129.8 mixed municipal waste	R3	M	Weighted	Offsite in Ireland	Enrich Environmental ,W/M/P 2004/57	Kilcock,Co. Kildare,, ,Ireland	
Within the Country	20 03 01	No	15371.57 mixed municipal waste	D5	M	Weighted	Offsite in Ireland	Thornions Waste Disposal ,W0195-01	Kilmairhamwood ,Kells ,Co Meath,, ,Ireland	
Within the Country	20 03 01	No	1106.46 mixed municipal waste	R1	M	Weighted	Offsite in Ireland	Bord Na Mona PLC,W0201-03	Dreih Landfill,Dreihid ,Co. Kildare,, ,Ireland	
Within the Country	20 03 01	No	3294.28 mixed municipal waste	D5	M	Weighted	Offsite in Ireland	Inclaver W/MF ,W0167-02,Carranstown ,Duleek,Co Meath,, ,Ireland	Carranstown ,Duleek,Co Meath,, ,Ireland	Greenogue Business Park ,Rathcoole ,Co Dublin , ,Ireland
Within the Country	20 03 01	No	1800.32 mixed municipal waste	D5	M	Weighted	Offsite in Ireland	Greenstar Ltd ,W0146-01	Knockharley Landfill ,Kenilworth ,Co Meath , ,Ireland	
Within the Country	20 03 01	No	5181.58 mixed municipal waste	R13	M	Weighted	Offsite in Ireland	Greenstar Holdings Ltd,W0165-02	Ballynagrán,Coobeg & Kicandra,Co. Wicklow,, ,Ireland	
Within the Country	20 03 01	No	4628.66 mixed municipal waste	R13	M	Weighted	Offsite in Ireland	Greenstar Ltd,W0053-03	Depot,Fasstaroe,Bray,Co Wicklow,Ireland	
Within the Country	20 03 07	No	65.22 bulky waste	D5	M	Weighted	Offsite in Ireland	Greenstar Ltd,W0053-03	Dreih Landfill,Dreihid ,Co. Kildare,, ,Ireland	
Within the Country	20 03 07	No	1421.96 bulky waste	R13	M	Weighted	Offsite in Ireland	Greenstar Ltd,W0053-03	Depot,Fasstaroe,Bray,Co Wicklow,Ireland	
Within the Country	20 03 07	No	8752.1 bulky waste	R13	M	Weighted	Offsite in Ireland	Greenstar Holdings Ltd,W0183-01	Millennium Park,Ballycoolin, Dublin 11, ,Ireland	

# **APPENDIX 2**

## Procedures List



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<b>Approved By:</b>	Malcolm Dowling – Group Environmental Manager	<b>Page 1 of 4</b>
	Oliver Callan – Group H&S Manager	

**Integrated Procedures - IP**

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

**Safety Procedures - SP**

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



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<b>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



## Amendment History

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### Amendment History

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



<b>Doc. No.:</b> Control	<b>Revision No.:</b> 02	<b>Issue Date:</b> 1 <sup>st</sup> February 2011
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