



Office of Environmental Enforcement, Environmental Protection Agency, McCumiskey House, Richview, Clonskeagh, Dublin 14.

31st March 2010

## RE: 2009 Annual Environmental Report – Greenstar Ltd – Greenogue - Reg. No. W0188-01

Dear Sir,

Please find enclosed an original and 2 no. copies of the 2009 Annual Environmental Report (AER) for the above referenced facility. The AER file has been uploaded to the EPA website and is a true copy of the original Annual Environmental Report. The AER/PRTR emissions data reporting workbook has also been uploaded to the EPA website.

Should you have any questions, please call me.

Yours sincerely,

dichel wasson.

Michael Watson

0904805/MG/MW Encs. c.c. Ms. Suzanne Byrne, Greenstar Ltd., Mr. James Sowray, Greenstar Ltd - Greenogue Depot email. info@ocallaghanmoran.com Website: www.ocallaghanmoran.com



### **ANNUAL ENVIRONMENTAL REPORT**

## FOR GREENSTAR LTD

## **GREENOGUE MATERIALS RECOVERY FACILITY**

## LICENCE NO. W0188-01

## JANUARY 2009 – DECEMBER 2009

### **Prepared For: -**

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

### **Prepared By: -**

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

## 31<sup>st</sup> March 2010

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Project	Annual Environmental Report 2009					
Client	Greenstar W0188-01	Greenstar Ltd.				
Report No	Date	Status	Prepared By	Reviewed By		
0480505	26/03/2010	Draft	Martina Gleeson PhD	Michael Watson MA.		
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## 1. INTRODUCTION

This is the 2009 Annual Environmental Report (AER) for the Greenstar Ltd. (Greenstar), Materials Recovery Facility (MRF) at Site 14B, Phase 3, Road 3A, Greenogue Industrial Estate, Rathcoole, Co. Dublin. A waste licence for the facility (Register No.W0188-01) was granted on 5<sup>th</sup> August 2004 by the Environmental Protection Agency (Agency).

This AER covers the period from the  $1^{st}$  January 2009 to the  $31^{st}$  December 2009. The content of the AER 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 Agency<sup>1</sup>.

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 EPA (Environmental Protection Agency) 1999 Waste Licensing – Draft Guidance on Environmental Management Systems and Reporting to the Agency

## 2. SITE DESCRIPTION

## 2.1 Site Location

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

## 2.2 Waste Management Activities

The licence allows Greenstar to accept and process on-site for recovery and disposal 95,000 tonnes of waste per annum, comprising Commercial & Industrial non-hazardous waste (C&I), household waste and Construction and Demolition (C&D) wastes.

All waste processing takes place inside the MRF building, as specified in Condition 5.1 of the Waste Licence. A list of the existing plant in use at the facility is given on Table 2.1.

Key processes carried out include: -

- Separation of C&I and C&D waste into different waste streams (paper, cardboard, glass, metal, organic),
- Bulking up of household wastes for further recovery or disposal at an appropriate off-site facility.

## 2.2.1 Waste Types

The facility is licensed to accept the following waste types, 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).

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

## Table 2.1Existing Plant

No.	Plant	Model	<b>Operational Capacity</b>
1	Loading Shovel	Volvo	70t/hr
1	Fork Lift	Toyota	60 hr/wk
1	Grab	Liebherr 360	25t/hr
1	Weighbridge – 2 scales	-	56hr wk

## 3. EMISSION MONITORING

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.

The monitoring results are submitted to the Agency at quarterly intervals. An overview of the results of the monitoring is presented in this Section, with summary data included.

## 3.1 Surface Water Quality Monitoring

Surface water monitoring was conducted at one monitoring point at the location shown on Figure 3.1. Surface water runoff is confined to run-off from the roofed area of the transfer building and to run-off from the paved yard areas and is completely dependent on rainfall. All water from the vehicle wash area is diverted to the wastewater drainage system.

The sampling and analysis was carried out in accordance with recognised quality assurance and control procedures. The range of analysis was as specified in Schedule D of the Waste Licence and included Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), suspended solids (TSS), pH, electrical conductivity, mineral oils, total nitrogen and total ammonia. The results were compared to the trigger levels and Emission Limit Values (ELVs) set in Condition 6.3.2 and Schedule C of the Licence. The results are included on summary Table 3.1.

In the first and second quarters, the BOD levels (228 mg/l and 27.3 mg/l respectively) exceeded the trigger level set in Condition 6.3.2 of the Licence (25 mg/l). The TSS levels recorded during the first and second quarter monitoring events (59 mg/l and 75 mg/l respectively) were also above the trigger level (35 mg/l). The levels of the other parameters were consistent with previous surface water monitoring results and were below emission and trigger limits in the licence.

The elevated TSS is associated with the disturbance of sediment in the base of the sample chamber, when the sample was collected. This disturbance was unavoidable due to the low flow at the time of sampling. The Agency, the Eastern Regional Fisheries Board and South Dublin County Council were notified of the exceedances of the trigger levels in accordance with the licence conditions.

Surface water run-off from the facility discharges via a petrol/oil interceptor to the storm drain serving the industrial estate. It is considered unlikely that the elevated BOD and TSS

resulted in significant impairment of, or significant interference with the environment beyond the facility boundary.

Following the exceedances in the first and second quarters, Greenstar engaged a specialist contractor (Horizon Environmental Ltd) to carry out extensive drainage investigations at the facility. The purpose of the investigation, carried out between the 5<sup>th</sup> and 8<sup>th</sup> of May 2009, was to determine the possible source of high BOD results. The investigation indicated that the source of the elevated BOD was likely to be the on-site attenuation tank which was not included in the routine storm drain and interceptor cleaning programme. Greenstar therefore proposed in a letter to the Agency of the 8<sup>th</sup> May 2009 to include the de-sludging of the attenuation tank along with the interceptor as part of a quarterly maintenance programme in conjunction with Condition 3.7.11 of the Licence.

In June 2009 a sample was taken following the cleaning of the drainage system. The results for both BOD (20 mg/l) and TSS (24 mg/l) were below the relevant trigger levels. The results for quarters three and four were significantly below the ELVs and trigger levels set in the Licence.

Parameter	Units	Q1 Feb	Q2 April	Q2 June	Q3 Sept	Q4 Dec	Trigger Levels	Emission Limit
pH	pH units	6.65	8.32	8.61	8.47	8.24	N/A	N/A
Temperature	°C	5.7	9.5	13.1	12	7.7	N/A	N/A
Conductivity	mS/cm	0.564	0.331	0.7	0.442	0.839	N/A	N/A
Total Ammonia	mg/l	4.3	0.6	6.79	0.37	2.9	N/A	N/A
BOD	mg/l	228	27.3	20	5	6	25	N/A
COD	mg/l	360	193	54	18	41	N/A	N/A
Total Suspended Solids	mg/l	59	75	24	21	<10	35	N/A
Total Nitrogen	mg/l	8.5	1.5	0.9	5.8	< 0.01	N/A	N/A
Mineral Oils	mg/l	1.272	<0.01	< 0.01	< 0.01	<0.01	N/A	5

**Table 3.1:**Surface water Monitoring Results 2009

## 3.2 Wastewater Monitoring

Waste water sampling was carried out at one sampling location shown on Figure 3.1. The sampling and analysis was carried out in accordance with recognised quality assurance and control procedures. The range of analysis was as specified in Schedule D of the Waste Licence and included BOD, COD, suspended solids, pH, ammoniacal nitrogen, sulphate, fats, oils and greases and detergents. The samples were compared to the ELVs set in Schedule C of the Licence. The results are summarised on Table 3.2. The results were all significantly below the ELVs set in the Licence.

Parameter	Units	Feb '09	Apr '09	June '09	Sept '09	Oct '09	Dec- 09	Emission Limit Value
рН	pH units	6.95	8.55	8.03	7.93	7.7	7.54	6 – 10
Temperature	°C	5.6	9.2	14	12.5	14.2	7.2	42
Sulphate	mg/l	96.39	33.07	11.71	29.67	10.4	13.21	1,000
BOD	mg/l	156	55	108	85	349	198	3,000
COD	mg/l	540	140	212	249	702	1020	6,000
Total Suspended Solids	mg/l	324	47	21	89	508	194	2,000
Oils, Fats & Greases	mg/l	2.442	1.19	2.821	<0.01	2.608	5.544	100
Ammoniacal Nitrogen	mg/l	5.3	1.17	5.59	9.67	9.38	3.2	100
Detergents (as MBAS)	mg/l	3.6	0.5	1.7	1	0.8	0.4	100

**Table 3.2:**Wastewater Monitoring Results 2009

## 3.3 Noise Survey

Greenstar carried out the annual noise survey on the 28<sup>th</sup> April 2009. Monitoring was carried out at the three noise monitoring locations, N-1, N-2 and N-3 specified in the licence and one off-site noise sensitive location, NSL-1, as shown on Figures 3.1 and 3.2. The ELV specified in the licence (55 Day dB(A) LAeq(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 compliance with its licence requirements. Noise emission from the facility were not audible above 55 Day dB(A) LAeq at the nearest noise sensitive location. The results are included on Table 3.3.

Station	Time	LAeq 30 min dB	LAF10 30 min dB	LAF90 30 min dB	Noise audible
N1	1131- 1201	60	62	49	Trucks idling near offices occasionally dominant. Intermittent truck movements through entrance significant. Grab and FEL audible within site. Also FLT. Occasional emissions audible at low level from premises to E. Aircraft audible, particularly light aircraft.
N2	1059- 1129	71	75	61	Site emissions dominant: grab, FEL and trucks manoeuvring onsite. Intermittent onsite bird scarer significant. Frequent aircraft audible, particularly light aircraft.
N3	1026- 1056	56	59	41	Site emissions dominant, particularly grab and FEL emissions within building. Vehicles moving around site audible. Intermittent onsite bird scarer significant. No offsite emissions audible from adjacent premises. Frequent aircraft audible, particularly light aircraft.
NSL1	1214- 1244	58	60	36	Distant emissions slightly audible in background from commercial estate to S (which includes Greenstar facility). Greenstar emissions not specifically discernible. Intermittent local traffic. Birdsong. Vocal calls from sports activity in distance audible at low level. Passing helicopter x1, and aircraft landing at adjacent aerodrome x1.

**Table 3.3:**Noise Monitoring Results 2009

## 3.4 Dust Monitoring

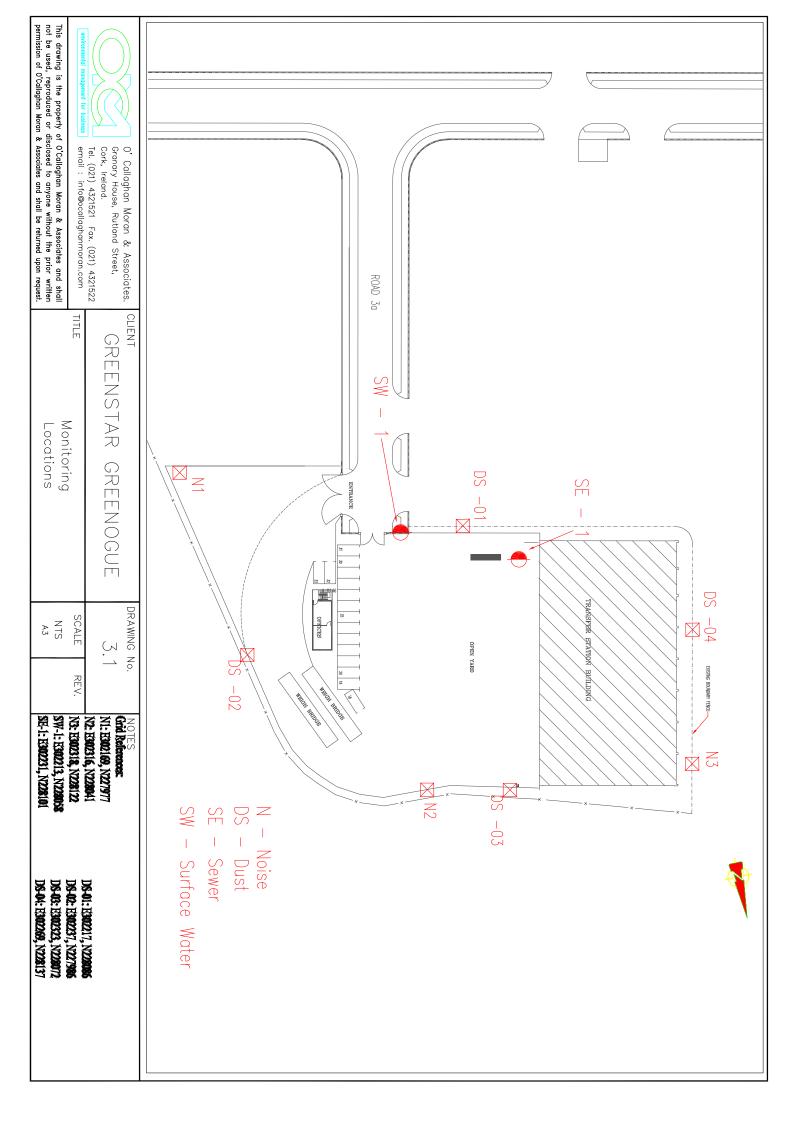
Dust monitoring was carried out on three occasions at four on-site locations (DS-01, DS-02, DS-03 and DS-04) in June, July and August 2009. The results of the monitoring are included on Table 3.4.

In June 2009 there was an exceedance of the deposition limit set in the licence (350 mg/m<sup>2</sup>/day) at DS-02 (432 mg/m<sup>2</sup>/day). All the other levels recorded were below the deposition limit set in the licence. The Agency was informed of the exceedance in a letter dated the  $4^{\text{th}}$  August 2009.

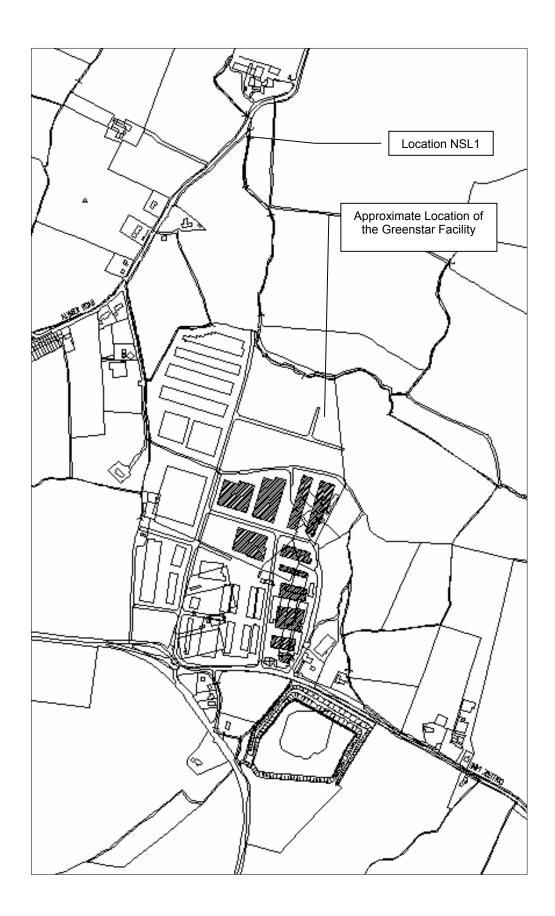
The dust levels in general are significantly contributed to by off-site sources. The facility is located within a busy industrial estate and is bound to the north, south, east and west by various industrial activities including an open plant storage yard, container storage yard and distribution warehouses. There are no sensitive receptors within 300m of the boundary.

	June '09 mg/m²/day	July '09 mg/m²/day	August '09 mg/m²/day	Dust Deposition Limit mg/m <sup>2</sup> /day
DS-01	253	102	98	350
DS-02	432	317	192	350
DS-03	327	205	156	350
DS-04	159	64	57	350

**Table 3.4:**Dust Monitoring Results 2009







## 4. SITE DEVELOPMENT WORKS

## 4.1 Specified Engineering Works

No Specified Engineering Works were carried out during the reporting period. Greenstar will inform the Agency about any proposed specified engineering works in accordance with Condition 3.2.1 of the Licence.

### 4.2 Summary of Resource & Energy Consumption

Table 4.1 presents an estimate of the resources used on-site during the reporting period from January to December 2009.

## Table 4.1Estimate of Resources Used On-Site

Resources	Quantities
Diesel	56,600 litres
Truck Wash	650litres
Engine Oil	900 litres
Electricity	115,600 kWh

## 4.3 Tank & Pipeline Integrity Testing

Tank and pipeline integrity tests were carried out on  $30^{th}$  December 2009 by Horizon Environmental Ltd and were passed fit for purpose. A copy of the results are included in Appendix 1.

Table 5.1 shows the total quantities of waste received and consigned from the facility in 2009, Table 5.2 shows the quantities for 2008 and Table 5.3 shows the waste quantities for previous years. A breakdown of the waste types is provided in accordance with the European Waste Catalogue and Hazardous Waste list.

The total quantity of waste received at the facility was 52,474.88 tonnes. The total waste consigned was 52,051.49 tonnes. The difference is due to waste remaining on site at the end of 2009 which will be consigned in 2010. The recovery rate for the facility is estimated at 66%.

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

EWC	Description	Waste In	Waste Out
			1,793.06
15 01 01	Cardboard Packaging	1,668.10	83.12
			99.06
	Plastic Drum Lid		2.92
	Drum Pizza Base		17.45
15 01 02			2.66
	Plastic Packaging	92.88	42.24 75.94
-		astic Packaging 92.88 Polystyrene 0.08	
	• •		7.06
15 01 03	Pallets	138.36	103.30 2,009.62
		Wooden Packaging334.13Aluminium3.30Metal2.87	
15 01 04			
15 01 06	Mixed Packaging	4,210.78	3,748.61
15 01 07	Mixed Glass	9.22	
16 05 04*	Gas Cylinders		1.82
16 06 01*	Battery Lead Acid		1.06
17 01 07	C&D Inert Mixed	3,471.05	4,868.45
17 02 01	Wood		24.94
17 04 11	Cable	1.74	
17.05.04	C&D Inert Mixed	1,181.78	
17 05 04	Soil & Stones	56.54	1,126.85
17 08 02	Plasterboard	41.02	32.68
19 09 05	Resin	53.66	
19 12 07	Wood		43.48
		4.02	44.72
	C&I Dry Mixed	4.92	8,676.08
		425.23	12,096.36
19 12 12			5,516.32
	MSW Municipal Mixed		5,107.28
			23.30
			1,918.58
	Cardboard & Paper	20.15	8.88
	Cardboard Packaging	16.68	
20 01 01	Newsprint	2.68	
_	Recy Confidential	8.58	
<b>a</b> a a <b>a</b> a	Recy Paper	30.59	
20 01 02	Glass	6.92	
20 01 08	Kitchen and Canteen Waste	2,377.68	07.26
20 01 08	Biodegradable Waste	_	97.36 1,533.75
20 01 11	Textile	0.05	
20 01 33*	Batteries		1.06
20 01 38	Wood	1,880.11	440.10
	Trays	2.51	
	Metallised CDs	2.86	
20 01 39	Plastic	109.40	
	CDs for shredding		13.98

Table 5.1Waste Received & Consigned 2009

EWC	Description	Waste In	Waste Out
20 01 40	Metal	729.20	885.14
20 02 01	Green Biodegradable Waste	1,685.66	23.28 1,580.98
	Green Mixed	151.84	
20 03 01	MSW Municipal Mixed	20,212.32	
20 03 07	C&I Dry Mixed	13,539.58	
	Total Received	52,472.47	
	Total Consigned		52,051.49
	<b>Total Recovered</b>		34,438.81
	Total Disposed		17,612.68
	Recovery Rate		66%

EWC	Description	Waste In	Waste Out
08 03 18	Toner	2.47	
08 03 99	Cartridges	0.12	
15 01 01	Cardboard Packaging	1,492.81	1,491.56 134.14 35.79
	Multi Produce Load		12.06
	Plastic Drum Lid	1.79	
	Plastic Film	7.54	21.60
	Plastic H/LDPE	0.97	
15 01 02	Plastic Packaging	302.15	11.34 12.86 5.52 5.87
	Pallets	249.39	153.89
15 01 03	Wooden Packaging	1,352.87	23.18 3,892.76
	Aluminium	1.21	1.86
15 01 04	Aluminium Cans	0.91	
	Foil	0.65	
15 01 05	Blister Pack	3.56	
15 01 06	Mixed Packaging	4,119.15	190.76 3,670.78
15 01 07	Glass Packaging	33.74	
16 02 14	IPC's Processors	3.03	
16 05 04	Gas Cylinders		0.96
17 01 07	C&D Inert Mixed	321.24	12,143.50
17.05.04	C&D Inert Mixed	9,479.95	19.98
17 05 04	Soil & Stones	65.94	
17 08 02	Plasterboard	53.50	13.94
19 05 03	Compost		26.32 1,250.21
19 08 05	Liq Waste		12.82
19 09 05	Resin	36.80	
19 12 07	Wood	2.71	
19 12 07	Fines C&D	<i>2.1</i> 1	23.96
17 12 07			15,173.92
			45.06
	C&I Dry Mixed	2.86	148.98
10 12 12			13,679,15
19 12 12 -	MSW Municipal Mixed		21.60 6,277.65 22.80 19.76
	Emmac Paper	1.15	
	Cardboard & Paper	124.34	23.46
20 01 01	Newsprint	1.55	
	Recy Confidential	2.50	
	Recy Paper	55.15	

Table 5.2Waste Received & Consigned in 2008

EWC	Description	Waste In	Waste Out
20 01 08	Compost	1,806.87	
20 01 35*	Electronics & Electrics	1.85	
20 01 38	Wood	3,953.77	875.38 618.58
	Beds	0.28	
20 01 39	Trays Metallised CDs Plastic	2.36 35.26 193.67	17.98
20 01 40	Metal	668.45	860.70
20 02 01	Green Biodegradable Waste	2,366.08	373.27 1,676.21 23.66
	Green Mixed	60.98	
20 03 01	MSW Municipal Mixed	14,554.38	3,744.52
20 03 07	C&I Dry Mixed	27,297.99	
	Total Received	68,661.96	
	Total Consigned		66,758.24
	Total Recovered		47,753.48
	Total Disposed		<u>19,004.86</u>
	<b>Recovery Rate</b>		71.53%

 Table 5.3 Previous Waste Consignments

Description	2008	2007	2006	2005	2004
Total Received	68,661.96	63,481.24	51,767.97	1,540.479	461.266
Total Consigned	66,758.24	60,776.28	51,175.53	1,400.659	411.801
<b>Total Recovered</b>	47,753.48	58,200.63	36,183.96	1,010.146	368.041
Total Disposed	19,004.86	2,575.65	15,093.39	390.513	43.76
<b>Recovery Rate</b>	71.53%	95.76%	71%	72%	89%

## 6.1 Incidents

The routine monitoring programme identified three environmental incidents related to exceedances of the dust deposition limit and surface water trigger levels. There were no other incidents at the facility as defined by the licence in 2009.

The dust deposition limit was exceeded during one monitoring event, however the source of the dust is considered to be predominantly off site sources. The Agency was notified of this exceedance in a letter dated the 4<sup>th</sup> August 2009.

In February and April 2009, the BOD and TSS trigger levels for surface water was exceeded. The Eastern Regional Fisheries Board, the Agency and South Dublin County Council were notified of the exceedance as required by Condition 11.3.c) of the Waste Licence (letters dated the 19<sup>th</sup> February and 8<sup>th</sup> May 2009).

Greenstar carried out a detailed site inspection and submitted a report to the Agency in May 2009. This report included measures to prevent contamination of the discharge to surface water and an updated surface water drainage drawing. There were no exceedances of the trigger levels following on from this investigation. It is considered unlikely that the recorded incidents had an environmental impact.

## 6.2 Register of Complaints

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

## 7. ENVIRONMENTAL DEVELOPMENT

## 7.1 Environmental Management Programme Report

Greenstar has developed an Environmental Management System (EMS) for the facility and the facility has been certified to ISO 14001. Details of the EMS including the proposed schedule of objectives and targets for 2010 are outlined below.

SGS External Audits carried out in March 2009 and September 2009 found no major or minor non conformities at the site. It is the Greenstar's aim to continually achieve this standard going forward.

7.1.1 Site Management Structure

Management and Staffing structure: -

Name: Aidan Shanahan

**Responsibility:** Head of Leinster MRF Operations; overall responsibility for the running of the business including environmental compliance

- **Experience:** 6 years working in the waste management industry and 16 years operational management experience; has completed the FÀS Waste Management Course
- Name: James Sowray
- **Responsibility:** Operations Manager; overall responsibility for the day to day site operations of the site including environmental compliance
- **Experience:** 8 years working in operations management; has completed the FÀS Management Course
- Name: Jonathon O'Keeffe (Nominated Deputy)

Responsibility: Dispatch Manager

**Experience:** 5 years working in waste management; has completed the FÀS Management Course

## 7.1.2 Staff Training

No training was carried out during the year.

## 7.2 Environmental Management Programme Progress Report & Proposal

### 7.2.1 Schedule of Objectives 2009 – Progress Report

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

### **Objective 1 – Environmental Monitoring**

Interceptors are serviced at least three times yearly or when necessary. In the event of a spill or fire water drain mats and spill kits will be used to prevent pollution entering the drains.

### **Objective 2 – Recovery Rate**

Facility staff were made aware of the need to recover and store separately gypsum wastes during 2009. The overall recovery rate fell marginally in 2009 due to the reduction in the volume of C&D wastes accepted at the facility. This meant that a higher proportion of the waste stream was C&I and household waste which is more difficult to recover.

### **Objective 3 – Maintain and Develop the Environmental Management System**

SGS External Audits carried out in March 2009 and September 2009 found no major or minor non conformities at the site. We will aim to continually achieve this standard going forward. Quarterly internal audits will continue to be carried out.

### **Objective 4 – Assess & Review Resource & Energy Consumption at the site**

Ongoing into 2010 – Corporate Objective in 2010

## **Objective 5 – Review & Assess the Effectiveness of Nuisance Control Procedures**

As part of internal and external ISO audits, procedures are assessed during the year and are found to be effective in controlling any nuisances from the site.

## 7.2.2 Schedule of Objectives 2010 – Proposal

A schedule of targets and objectives for 2010 has been set by the management of the Greenogue facility. These objectives are outlined in Table 7.2.

Table 7.1	Schedule of Objective and Targets 2009
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No	Objective	Target	Responsibility	Timescale
1	Environmental Monitoring	Improve compliance with the surface water emission limits	Facility Manager	Q2 2009 & Ongoing
2	<b>Recovery Rate</b>	Increase awareness for the necessity of gypsum recycling	Increase awareness for the necessity of gypsum recycling Facility Manager	
•	Maintain and Develop	Maintain Documentation for EMS and implement on site	Environmental	Ongoing
3	the Environmental Management System	Up date manual and procedures where required	Department	
	Assess & Review	Continue to Review & Implement recommendations from the energy audit	- Facility Manager	0
4	Resource & Energy Consumption at the site			Ongoing
	Review & Assess the	Continually review and assess all nuisance control procedures	Facility Manager/	
5	Effectiveness of Nuisance Control Procedures	Ensure litter is removed at the end of each working day	Environmental Department	Ongoing

## Table 7.2Schedule of Objective and Targets 2010

No	Objective	Target	Responsibility	Timescale
1	Awareness and Training	Continue to ensure that appropriate training is carried out specific to all site personnel as per the Company's established Training Matrix. Spill training, inclusive of a spill scenario to be carried out.	Site Management	Ongoing
2	Energy & Resource Consumption	Summarise energy and resource usage on a quarterly basis with a view to reducing consumption Review and implement findings of Energy Audit	Site Management	Ongoing
3	Review and Assess the Effectiveness of Nuisance Control Procedures	Continually review and assess all nuisance control procedures to ensure minimal impact on the surrounding area.	Site Management	Ongoing
4	Pollution Prevention	Strive to ensure that monitoring results comply with the licence limits and investigate any exceedances of emission limit values. Continue to ensure the integrity and maintenance of all drainage infrastructure.	Site Management	Ongoing
5	ISO Certification	Continue to maintain ISO 14001 certification.		Ongoing
6	Traffic Management	Assess and Improve traffic management on site	Site Management	Q2 2010
7	Material Storage	Improve waste storage and segregation infrastructure within the MRF building and define further the various waste designated areas.	Site Management	Q2 2010

## 7.3 Communications Programme

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

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

Records available for public inspection on site include:-

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

Opening Times for Inspection of Records are from 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 2009. A bird repellent kite was obtained and situated on the boundary fence and has proved effective in keeping the numbers of birds at the site to a minimum.

## 7.5 Waste Recovery Report

National and regional policy on waste management is based on the Department of the Environment and Local Government's policy statement of September 1998, "Changing Our Ways", in which the Government affirmed its commitment to the EU hierarchy of waste management. In order of preference this is: -

- Prevention,
- Minimisation,
- Reuse,
- Recycling,
- Energy Recovery,
- Disposal.

The policy statement was based on, and is supported by, EU legislation (Landfill Directive 99/339/EC) that requires the diversion of organic wastes, including green waste, from landfill to alternative waste treatment facilities.

The facility, which is designed to increase the recycling of biodegradable materials and reduce the volume of waste disposed to landfill, meets the needs identified in EU and national waste policy statements and contributed to the achievement of these goals as out of approximately 52,051 tonnes of waste accepted approximately 66 % was sent for recovery.

### 7.6 Report Financial Provision

Greenstar has accrued over  $\notin$ 3,000,000 in funds, to provide for any potential environmental liabilities. Greenstar has adequate insurance cover for environmental liabilities to  $\notin$ 6,350,000 for any one occurrence, which will apply to "sudden identifiable and unintended incidents".

### 7.7 European Pollutant Release and Transfer Register

Under the European Pollutant Release and Transfer Register Regulation (EC) No. 166/2006 Greenstar are required to submit information annually to the Agency. A copy of the information submitted to the Agency via the web-based data reporting system is included in Appendix 2.

## 8. OTHER REPORTS

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

# **APPENDIX 1**

Horizon Environmental Ltd - Tank Test Report



## HORIZON ENVIRONMENTAL LTD.

Unit 26a Collinstown Cross Ind Est **Old Airport Road** Cloghran Co. Dublin Tel: (01) 8625030 (01) 8620880 Fax: Email: info@horizonenvironmental.ie

## Facsimile

Fax no.: Greenstar Recycling Ltd Company: Attention of: Suzanne Byrne Subject: **Inspection at Greenstar Greenogue** 

Tel no.:087 2281318 From: Matthew Kilcawley Date: 30<sup>th</sup> March 2010 Letter of Conformity for CCTV Drain Survey and Tank

No.of Pages: 2

Dear Suzanne,

Further to the completion of the drain inspection and tank inspection works we can confirm that no defects were detected

Please find the methods used and the attached cctv report.

### Job Title: CCTV SURVEY OF DRAINS

**Equipment**: CCTV survey unit.

Camera with pan and rotate facility.

On board reporting facility.

WRC STANDARDS 2002

**P.P.E.:** Wet Gear Clothing High Visibility Vests

Hard Hats

Gloves

- Liquid Waste Management ٠
- **Drain Cleaning & Plumbing**
- **CCTV Drain Surveys**
- **Hazardous Waste Management**

Safety Boots

Overalls

Safety Glasses

ALL PERSONNEL SUITABLY TRAINED FOR WORKING IN CONFINED SPACES.

Gas detectors / escape sets supplied when required.

## Number of Operatives: 2

- Works Description: Works Description: To gain access to the said lines through the manholes with the inspection equipment. To carry out the survey of the lines using pan and rotate cameras.
- To carry out a survey of the foul and effluent drains
- On completion of the survey to edit the video tape/DVD recordings and produce an engineer's report which is the 'WINCAN' software generated. The interrogation will produce a report highlighting any structural defects or other issues that require attention. Photographic stills of those issues highlighted will accompany the report.
- All coding of the defects is as per WRC\WSA\FWR Manual of Sewer Condition Classification 4<sup>th</sup> Edition BS EN 13508-2: 2003.

## Bund Test-BS 8007: 1987

To test Bund Areas.

- The client to fill bunds with water to 110% of the tanks volume.
- To observe drop over 1 day period.
- To make note of ambient temperature to allow for taking evaporation into account.
- To Confirm dimensions of each of the bunds
- A 24 hour period is required for water to absorb into concrete.
- All electrics must be isolated prior to test by client.
- All rubbish and other material in bund areas must be removed prior to test by client.

Underground Tanks:

To empty the underground tank and with confined space entry equipment and suitably trained operatives to assess the condition of the floor, wall and roof of the tank and report with Photographs highlighting any defects found. On completion to off load the water back into the tank.

Assuring you of our best endeavours at all times.

\_\_\_\_

Yours sincerely,

Matthew Kilcawley B.Eng

Horizon Environmental Ltd.

# **APPENDIX 2**

European Pollutant Release and Transfer Register



**REFERENCE YEAR** 2009

| PRTR# : W0188 | Facility Name : Greenstar Materials Recovery Ltd | Filename : W0188\_2009.xls | Return Year : 2009 |

# **AER Returns Worksheet**

Version 1.1.10

1. FACILITY IDENTIFICATION	
Parent Company Name	Greenstar Materials Recovery Ltd
Facility Name	Greenstar Materials Recovery Ltd
PRTR Identification Number	W0188
Licence Number	W0188-01
Waste or IPPC Classes of Activity	
No.	class_name
	Recycling or reclamation of organic substances which are not used as solvents (including composting

rice young of rectanduler of erganic babelaneee which are not about ab belivente (melading composing
and other biological transformation processes).
Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this
Schedule.
Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.
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.
Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule.
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.
Recycling or reclamation of metals and metal compounds.
Recycling or reclamation of other inorganic materials.
14B Phase 3
Road 3A
Greenogue Industrial Estate
Rathcoole, Co Dublin
Ireland
-6.46619 53.2936
IEEA
3832
Recovery of sorted materials
Suzanne Byrne
suzanne.byrne@greenstar.ie
Environmental Executive
01-2947949
01-2947900
0.0
0
0
0

### 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 20	02)
Is it applicable?	
Have you been granted an exemption ?	
If applicable which activity class applies (as per	
Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being	
used ?	

#### 4.1 RELEASES TO AIR

| PRTR# : W0188 | Facility Name : Greenstar Materials Recovery Ltd | Filename : W0188\_2009.xls | Return Year : 2009 |

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### SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

	RELEASES TO AIR							
POLLUTANT		METHOD				QUANTITY		
		Method Used						
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Ye	ear 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 AIR								
POLLUTANT			1	METHOD	QUANTITY				
		Method Used							
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental	l) 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 AIR								
POLLUTANT			1	METHOD	QUANTITY				
				Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/	/ear F (Fugi	itive) KG/Year
					0.0	)	0.0	0.0	0.0

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 Materials Recovery Ltd				-				
Please enter summary data on the									
quantities of methane flared and / or utilised			Meth	nod Used					
				Designation or	Facility Total Capacity m3				
	T (Total) kg/Year	M/C/E	Method Code	Description	per hour				
Total estimated methane generation (as per									
site model)	0.0				N/A				
Methane flared						(Total Flaring Capacity)			
Methane utilised in engine/s					0.0	(Total Utilising Capacity)			
Net methane emission (as reported in Section									
A above)	0.0				N/A				

#### 4.2 RELEASES TO WATERS

PRTR# : W0188 | Facility Name : Greenstar Materials Recovery Ltd | Filename : W0188\_2009.xls | Return Year : 2009 |

31/03/2010 16:18

SECTION A : SECTOR SPECIFIC PRTR PO	LLUTANTS	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									
	RELEASES TO WATERS										
	POLLUTANT						QUANTITY				
				Method Used	SW-1						
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year			
10		F		Flow was estimated based on rainfall amount over the year and the area of the facility. The analysis was	17 00000	17 0000					
12	Total nitrogen	E	Estimate	ISO accredited	17.60336	17.60336	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						
	POLLUTANT					QUANTITY	
			Method Used			1	
No. Annex II	Name	M/C/E	Method Code Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
				0.	0.0	0.0	0.0

\* 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							
		POLLUTANT						QUANTITY	
					Method Used	SW-1			
	Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
238		Ammonia (as N)	E	Estimate	Flow was estimated based on rainfall amount over the year and the area of the facility. The analysis was ISO accredited	12.61539	12.61539	0.0	0.0
303		вор	E	Estimate	Flow was estimated based on rainfall amount over the year and the area of the facility. The analysis was ISO accredited	241.4295	241.4295	0.0	0.0
306		сор	E	Estimate	Flow was estimated based on rainfall amount over the year and the area of the facility. The analysis was ISO accredited	561.6209	561.6209	0.0	0.0
240		Suspended Solids	E	Estimate	Flow was estimated based on rainfall amount over the year and the area of the facility. The analysis was ISO accredited	188.6827	188.6827	0.0	0.0
324		Mineral oils	E	Estimate	Flow was estimated based on rainfall amount over the year and the area of the facility. The analysis was ISO accredited	5.363227	5.363227	0.0	0.0

### 4.3 RELEASES TO WASTEWATER OR SEWER

| PRTR# : W0188 | Facility Name : Greenstar Materials Recovery Ltd | Filename : W0188\_2009.xls | Rr 31/03/2010 16:19

### SECTION A : PRTR POLLUTANTS

	OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR W/							
	POLLUTANT			METHOD	QUANTITY			
				Method Used				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0		0.0 0.0	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												
	POLLUTANT		N	IETHOD			QUANTITY					
				Method Used	SE-1							
Pollutant No.	Name	M/C/E	Method Code		Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year				
				Based on an estimate of								
				water used in the wheel								
				wash and run off from the								
343	Sulphate	E	Estimate	MRF building	81.0208	81.0208	0.0	0.0				
				Based on an estimate of								
				water used in the wheel								
				wash and run off from the								
303	BOD	E	Estimate	MRF building	396.25	396.25	0.0	0.0				
				Based on an estimate of								
				water used in the wheel								
				wash and run off from the								
306	COD	E	Estimate	MRF building	1192.9167	1192.9167	0.0	0.0				
				Based on an estimate of								
				water used in the wheel								
				wash and run off from the								
240	Suspended Solids	E	Estimate	MRF building	492.9167	492.9167	0.0	0.0				
				Based on an estimate of								
				water used in the wheel								
				wash and run off from the								
314	Fats, Oils and Greases	E	Estimate	MRF building	7.3025	7.3025	0.0	0.0				
				Based on an estimate of								
				water used in the wheel								
				wash and run off from the								
238	Ammonia (as N)	E	Estimate	MRF building	14.2958	14.2958	0.0	0.0				
				Based on an estimate of								
				water used in the wheel								
				wash and run off from the								
308	Detergents (as MBAS)	E	Estimate	MRF building	3.3333	3.3333	0.0	0.0				

### 4.4 RELEASES TO LAND

### | PRTR# : W0188 | Facility Name : Greenstar Materials Recovery Ltd | Filename : W0188\_2009.xls | Return Year : 2009 |

31/03/2010 16:19

### SECTION A : PRTR POLLUTANTS

	RELEASES TO LAND							
	POLLUTANT		Ν	METHOD		QUANTITY	Y	
				Method Used				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Acciden	ntal) 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)

	RELEASES TO LAND											
	POLLUTANT		ME	THOD			QUANTITY					
				Method Used								
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Y	'ear				
						0.0	0.0	0.0				

#### AER Returns Worksheet

			Quantity (Tonnes per Year)	Wast		Method Used		Haz Waste : Name and Licence/Permit No of Next Destination Facility Haz Waste: Name and Licence/Permit No of Recover/Disposer	<u>Haz Waste</u> : Address of Next Destination Facility <u>Non Haz Waste</u> : Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destinati i.e. Final Recovery / Disposal Si (HAZARDOUS WASTE ONLY
	European Waste			Treatm	ent		Location of				
Fransfer Destination	Code	Hazardous	Descripti	ion of Waste Operat	on M/C/	E Method Used	Treatment		Rosemount Business		
								Bailey Waste Paper, WPT	Park,Blanchardstown,Dublin		
Vithin the Country	15 01 01	No	1793.06 Cardboard Packagin	ig R3	М	Weighed	Offsite in Ireland		16,.,Ireland		
Vithin the Country	15 01 01	No	83.12 Cardboard Packagin	g R13	м	Weighed	Offsite in Ireland	Greenstar Ltd.,W0053-03	Fassaroe,Bray,Co. Wicklow,,Ireland		
within the obtainity	10 01 01		00.12 Caraboara Fabriagin	9 110		Teigned			Unit 2B Kylemore Industrial		
									Estate,Killen		
Vithin the Country	15 01 01	No	99.06 Cardboard Packagin	q R3	м	Weighed	Offsite in Ireland	Rebox Recycling,CP D95/1	Road,Ballyfermot,Dublin 10,Ireland		
									Fassaroe,Bray,Co.		
Within the Country	15 01 02	No	2.92 Plastic Drum Lid	R13	м	Weighed	Offsite in Ireland	Greenstar Ltd.,W0053-03	Wicklow,.,Ireland		
								Bailey Waste Paper, WPT	Rosemount Business Park,Blanchardstown,Dublin		
Within the Country	15 01 02	No	17.45 Drum Pizza Base	R3	М	Weighed	Offsite in Ireland		16,.,Ireland		
Within the Country	15 01 02	No	2.66 Drum Pizza Base	R13	м	Weighed	Offsite in Ireland	Greenstar Ltd.,W0053-03	Fassaroe,Bray,Co. Wicklow,,Ireland		
	10 01 02								Rosemount Business		
Mithin the Occurrence	45.04.00	NI-	10.04 Pleatic Packarian	Do	м	Mateland	Officity in Inclosed	Bailey Waste Paper, WPT	Park,Blanchardstown,Dublin		
Within the Country	15 01 02	No	42.24 Plastic Packaging	R3	IVI	Weighed	Offsite in Ireland	(T)B	16,.,Ireland Fassaroe,Bray,Co.		
Within the Country	15 01 02	No	75.94 Plastic Packaging	R13	М	Weighed	Offsite in Ireland	Greenstar Ltd.,W0053-03	Wicklow,.,Ireland		
Within the Country	15 01 02	No	7.06 Polystyrene	R13	м	Weighed	Offsite in Ireland	Greenstar Ltd.,W0053-03	Fassaroe,Bray,Co. Wicklow,,Ireland		
Within the Country	15 01 02	INU	7.00 Tolystyrene	nıə	IVI	weighed	Offsite in freidric	Creenstar Ltd., W0035-05	Unit 1		
	45.04.00			Da			0		Colemanstown, Rathcoole, Co		
Within the Country	15 01 03	No	103.3 Pallets	R3	М	Weighed	Offsite in Ireland	Max Pallets,N/A	. Dublin,.,Ireland Fassaroe,Bray,Co.		
Within the Country	15 01 03	No	2009.62 Wooden Packaging	R13	м	Weighed	Offsite in Ireland	Greenstar Ltd.,W0053-03	Wicklow,.,Ireland		
Nithin the Country	15.01.00	No	3748.61 Mixed Packaging	D10	м	Weighed	Offeite in Iteland	Greenstar Ltd.,W0053-03	Fassaroe,Bray,Co. Wicklow,,Ireland		
Within the Country	15 01 06	No	3748.61 Mixed Packaging	R13	IVI	Weighed	Offsite in Ireland	Greenstar Ltd., W0053-03	Longmile Road, Dublin	Calor Gas,N/A,Longmile	Longmile Road, Dublin
Within the Country	16 05 04	Yes	1.82 Gas Cylinders	R4	М	Weighed	Offsite in Ireland	Calor Gas,N/A	12,.,.,Ireland	Road, Dublin 12,.,., Ireland	12,,Ireland
									Cappincur Industrial	KMK Metals Recycling Ltd,W0113-01,Cappincur	Cappincur Industrial
									Estate, Daingean	Industrial Estate, Daingean	Estate, Daingean
	40.00.04	N/		54			0	KMK Metals Recycling	Road, Tullamore, Co.	Road,Tullamore,Co.	Road,Tullamore,Co.
Within the Country	16 06 01	Yes	1.06 Battery lead Acid	R4	М	Weighed	Offsite in Ireland	Ltd.,W0113-03	Offaly, Ireland Fassaroe, Bray, Co.	Offaly, Ireland	Offaly, Ireland
Within the Country	17 01 07	No	4868.45 C&D Inert Mixed	R13	М	Weighed	Offsite in Ireland	Greenstar Ltd.,W0053-03	Wicklow,.,Ireland		
Within the Country	17.02.01	No	24.94 Wood	R13	м	Weighed	Offsite in Ireland	Greenstar Ltd., W0053-03	Fassaroe,Bray,Co. Wicklow,,Ireland		
what in the obtaining	17 02 01		24.54 11000	1110		Teigned			Wieldow,,incland		
Within the Country	17 05 04	No	1126.85 Soil & stones	R5	м	Weighed	Offsite in Ireland	Kingsbog,90317	Nurney, Co. Kildare,, Ireland		
Within the Country	17 08 02	No	32.68 Plasterboard	R5	М	Weighed	Offsite in Ireland	Gypsum Recycling Ireland,WMP 238/2006	Rathcoffey, Donadea, Naas, C o. Kildare, Ireland		
									Fassaroe,Bray,Co.		
Within the Country	19 12 07	No	43.48 Wood	R13	м	Weighed	Offsite in Ireland	Greenstar Ltd.,W0053-03	Wicklow,.,Ireland Fassaroe,Bray,Co.		
Vithin the Country	19 12 12	No	44.72 C&I Dry Mixed	R13	М	Weighed	Offsite in Ireland	Greenstar Ltd.,W0053-03	Wicklow,.,Ireland		
									Millennium Business		
Within the Country	19 12 12	No	8676.08 C&I Dry Mixed	R13	м	Weighed	Offsite in Ireland	Greenstar Ltd., W0183-01	Park,Ballycoolin,Dublin 11,Ireland		
									Drehid Landfill,Drehid ,Co.		
Within the Country	19 12 12	No	12096.36 MSW Municipal Mixe	ed D5	М	Weighed	Offsite in Ireland	Bord Na Mona,W0201-02	Kildare,.,Ireland		
									Knockharley Landfill,Kentstown,Navan,Co		
ithin the Country	19 12 12	No	5516.32 MSW Municipal Mixe	ed D5	М	Weighed		Greenstar Ltd.W0146-01	. Meath.Ireland		

#### 5 ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE L DDTD# - W0199 L Casilla Name - Creater Materials Resource Ltd L Citerante - W0199, 2000 via L Datum Vers - 2000

| PRTR# : W0188 | Facility Name : Greenstar Materials Recovery Ltd | Filename : W0188\_2009.xls | Return Year : 2009 |

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				Quantity (Tonnes per						Haz Waste : Name and Licence/Permit No of Next Destination Facility <u>Non</u> <u>Haz Waste</u> : Name and Licence/Permit No of	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE	Actual Address of Final Destination i.e. Final Recovery / Disposal Site
				Year)				Method Used		Recover/Disposer	Recover/Disposer	ONLY)	(HAZARDOUS WASTE ONLY)
		-				Waste							
	Fransfer Destination	European Waste Code	Hazardous		Description of Waste	Treatment Operation	M/C/E	Method Used	Location of Treatment				
	Tansier Destination	Code	Hazaluous		Description of Waste	Operation	W//0/E	Wethou Oseu	Heatment		Fassaroe,Bray,Co.		
	Vithin the Country	19 12 12	No	5107 28	MSW Municipal Mixed	R13	м	Weighed	Offsite in Ireland	Greenstar Ltd.,W0053-03	Wicklow,Ireland		
				0107.20							Millennium Business		
											Park,Ballycoolin,Dublin		
١	Vithin the Country	19 12 12	No	23.3	MSW Municipal Mixed	R13	M	Weighed	Offsite in Ireland	Greenstar Ltd.,W0183-01	11,.,Ireland		
											Rathdrinagh,Beauparc,Nava		
1	Vithin the Country	19 12 12	No	1918.58	MSW Municipal Mixed	R13	М	Weighed	Offsite in Ireland	Panda Waste,W0140-04	n,Co. Meath,Ireland		
											Fassaroe,Bray,Co.		
`	Vithin the Country	20 01 01	No	8.88	Cardboard & Paper	R3	М	Weighed	Offsite in Ireland	Greenstar Ltd.,W0053-03	Wicklow,.,Ireland Miltownmore,Fethard.Co.		
	Vithin the Country	20.01.09	No	07.26	Biodegradable Waste	R3	м	Weighed	Offsite in Ireland	Miltown Composting Systems, WP 019 02	TipperarIreland		
``	vitiliti the Country	20 01 08	NU	97.30	biologiadable waste	пэ	IVI	weighed	Offsite in freidric	Waddock	Killamaster,Co.		
	Vithin the Country	20 01 08	No	1533 75	Biodegradable Waste	R3	м	Weighed	Offsite in Ireland	Composting,WP11/04	Carlow,,Ireland		
	,									g,		KMK Metals Recycling	
													Cappincur Industrial
													Estate, Daingean
										KMK Metals Recycling			Road,Tullamore,Co.
<b>۱</b>	Vithin the Country	20 01 33	Yes	1.06	Batteries	R5	М	Weighed	Offsite in Ireland	Ltd.,W0113-03		Offaly, Ireland	Offaly, Ireland
											Fassaroe,Bray,Co.		
`	Vithin the Country	20 01 38	No	440.1	Wood	R13	М	Weighed	Offsite in Ireland	Greenstar Ltd.,W0053-03	Wicklow,.,Ireland		
										Greenway Ireland Ltd.,ROC	Road.Mountnorris.Co.		
-	o Other Countries	20.01.39	No	13.98	CDs for Shredding	R5	м	Weighed	Abroad	621 (NI 00611)	Antrim.BT60 2TY.Ireland		
	o other obuilties	20 01 00	140	10.00	obs for onredding	110		Treigheu	101000		Pigeon House Road, Dublin		
	Vithin the Country	20 01 40	No	885.14	Metal	R4	м	Weighed	Offsite in Ireland	Davis Recycling, WP 98067	4,,Ireland		
										Enrich Environmental,WMP			
١	Vithin the Country	20 02 01	No	23.28	Green Biodegradable Waste	R3	М	Weighed	Offsite in Ireland	2004/57	Kilcock,Co. Kildare,.,.,Ireland		
											Fassaroe,Bray,Co.		
1	Vithin the Country	20 02 01	No		Green Biodegradable Waste	R13	М	Weighed	Offsite in Ireland	Greenstar Ltd.,W0053-03	Wicklow,.,Ireland		

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