



Mr. Donal Howley,
Office of Environmental Enforcement,
East/North East Region,
Environmental Protection Agency,
McCumiskey House,
Richview,
Dublin 14.

31st March 2010

RE: 2009 Annual Environmental Report - Greenstar Ltd.- Millennium Business Pk
(Reg. No. W0183-01)

Dear Mr. Howley,

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.

If you have any queries, please call me.

Yours sincerely,



Michael Watson

0904806/MG/MW

Encs.

c.c. Mr. Suzanne Byrne, Greenstar Ltd.
Mr. Simon Kelly, Greenstar Ltd.



ANNUAL ENVIRONMENTAL REPORT
GREENSTAR LIMITED
MATERIALS RECOVERY FACILITY
MILLENNIUM BUSINESS PARK
LICENCE NO. W0183-01
JANUARY 2009 – DECEMBER 2009

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31st March 2010

Project		Annual Environmental Report 2009		
Client		Greenstar Ltd. W0183-01		
Report No	Date	Status	Prepared By	Reviewed By
0480605	19/03/2010	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 Millennium Business Park, Grange, Ballycoolin, Dublin 11. The Waste Licence (Register No.W0183-01) for the facility was issued on 15th April 2005 and the facility began accepting waste in mid July 2006.

This AER covers the period from January 2009 to December 2009. The content is based on Schedule G of the Waste Licence and the report format follows guidelines set in the “Guidance Note for Annual Environmental Report” issued by the Environmental Protection Agency (Agency)¹.

¹ EPA (Environmental Protection Agency) 1999 Waste Licensing – Draft Guidance on Environmental Management Systems and Reporting to the Agency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

The facility occupies 4.45 hectares (ha) in the east of the Millennium Business Park, Ballycoolin, Dublin 11. It is intended to develop the facility in a number of Phases. Phases 1 and 2 opened in July 2006 and involved the construction of the Materials Recovery Facility (MRF) and supporting ancillaries.

2.2 Waste Management Activities

The facility is licensed to accept and process 220,000 tonnes of waste per annum, comprising commercial/industrial non-hazardous waste, municipal waste and construction and demolition wastes.

2.3 Waste Types

The facility can accept the following waste types and volumes as specified in Schedule A of the Waste Licence: -

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

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

Key processes carried out include: -

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

All waste processing takes place inside the building, as specified in Condition 4.1 of the Waste Licence. Table 2.1 details the on-site machinery.

Table 2.1 On-Site Machinery

No.	Plant	Model	Operational Capacity tpd	Standby Capacity tpd
	Synmet C&D process line	Synmet	1200	750
	Synmet C&I process line	Synmet	1200	750
	C&I Loading grab	Fuchs MHL 340	2160	1710
	C&I Loading grab	Fuchs MHL 335	2160	1710
	C&I sorting grab	Liebherr L904	972	672
	C&D Loading shovel	Volvo L120E	8640	7440
	Output area Loading shovel	Volvo L150F	3024	2124
	Output area Loading grab	Liebherr 924	972	672
	Compactor bin RORO shunter		216	88

C & I Waste

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

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

Construction & Demolition Waste

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

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

3. EMISSION MONITORING

The monitoring required for Phases 1 and 2 includes surface water, wastewater, dust and noise monitoring. The monitoring locations are shown on Figure 3.1. As per the Licence, monitoring results are included in reports submitted to the Agency at quarterly intervals. An overview of the results of the monitoring is presented in this Section.

3.1 Surface Water Monitoring

Surface water monitoring is carried out quarterly at two monitoring points (SW-1 and SW-2) as shown on Figure 3.1. The surface water drainage system serves the paved area of the site and roofed areas. As only Phase 1 & 2 of the facility has been constructed, approximately 50% of the site is currently paved.

During the monitoring period there was no flow in SW-1 and therefore it was not possible to collect a representative sample. Samples were collected from SW-2 in each of the quarters. The sampling and analysis was carried out in accordance with recognised quality assurance and control procedures.

The trigger levels set for BOD, total suspended solids and mineral oils were not exceeded and the discharge was in compliance with the licence conditions. The results are included on Table 3.1.

Table 3.1 Surface Water Monitoring Results 2009 SW-2

Parameter	Units	Q1	Q2	Q3	Q4	Trigger Levels
pH	pH Units	7.21	8.26	8.44	8.29	N/A
Conductivity	mS/cm	0.709	0.322	0.4	0.788	N/A
Temperature	°C	4.7	14	17.8	8.2	N/A
Ammoniacal Nitrogen	mg/l	<0.01	0.36	1.5	0.5	N/A
BOD	mg/l	2	3	25	2	25
COD	mg/l	450	528	78	20	N/A
Total Suspended Solids	mg/l	29	<10	16	<10	35
Oils, Fats & Greases	mg/l	<0.01	0.17	0.452	0.43	N/A
Mineral Oils	mg/l	<0.01	0.018	<0.01	<0.01	5

3.2 Wastewater Monitoring

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

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

OCM collected six waste water samples in 2009. The Emission Limit Values were not exceeded during the reporting period and the discharge was in compliance with the licence conditions. The results are shown on Table 3.2.

Table 3.2 Wastewater Monitoring Results 2009 SE-1

Parameter	Units	Feb '09	Apr '09	June '09	Sept '09	Oct '09	Dec '09	Emission Limit
pH	pH Units	7.36	8.25	7.58	8.21	7.66	8.36	6 – 10
Temperature	°C	5.5	8.7	14	10.5	14.7	7.9	42
Ammoniacal Nitrogen	mg/l	<0.01	0.25	14.97	3.6	9.33	3	100
BOD	mg/l	4	3	326	28	39	11	6,000
COD	mg/l	110	28	528	52	231	93	12,000
Total Suspended Solids	mg/l	<10	66	117	481	284	45	2,500
Oils, Fats & Greases	mg/l	0.69	2.35	<0.01	4.074	4.242	3.163	100
Orthophosphate	mg/l	<0.005	<0.03	0.03	0.04	<0.06	0.12	100
Surfactants	mg/l	<0.2	0.4	7.1	0.3	0.7	0.3	100
Sulphate	mg/l	45.79	67.07	70.54	28.26	316.1	93.16	1,000

3.3 Noise Monitoring

The annual noise survey was carried out in April 2009. The full monitoring report was submitted to the Agency on the 7th July 2009. The monitoring locations included those specified in the Licence (N-1, N-2 and N-3) and one off-site noise sensitive location NSL-1 shown on Figures 3.1 and 3.2. The survey was conducted when the site was fully operational and confirmed that noise emissions complied with the Licence conditions and that the facility is not impacting negatively on the nearest sensitive receptors. A summary of the noise results is shown on Table 3.3.

The $L_{Aeq\ 30\ min}$ level recorded at the offsite station NSL1 was 68 dB, due chiefly to local road traffic which was almost continuous and dominant. No emissions were audible from the Greenstar facility. Therefore noise emissions from the facility did not contribute to the noise environment at NSL1, and the $L_{Aeq\ 30\ min}$ level recorded was not influenced by the Greenstar facility.

Table 3.3 Noise Monitoring Results 2009

Station	Time	$L_{Aeq\ 30\ min}$ dB	$L_{AF10\ 30\ min}$ dB	$L_{AF90\ 30\ min}$ dB	Noise audible
N1	1432-1502	49	49	45	Continuous air handling system emissions audible at low level. Manoeuvring trucks onsite also audible. Significant screening provided by intervening earth mound. Birdsong. Emissions from industrial/commercial sites to NW continuously audible at low level. Intermittent aircraft.
N2	1507-1537	64	65	63	Continuous air handling system dominant. Intermittent truck movements audible. No offsite emissions audible other than aircraft.
N3	1356-1426	73	74	71	Continuous emissions from air handling system through vents in upper facade dominant. Trucks manoeuvring nearby intermittently. Emissions also audible continuously from adjacent quarry site, particularly front end loader reversing alarm. No other emissions audible.
NSL1	1546-1616	68	72	52	Site emissions not audible. Road traffic almost continuous and dominant. During lulls, distant traffic audible. Aircraft.

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 Licence requires two of these monitoring events be carried out between May and September. The results of the monitoring are included on Table 3.4.

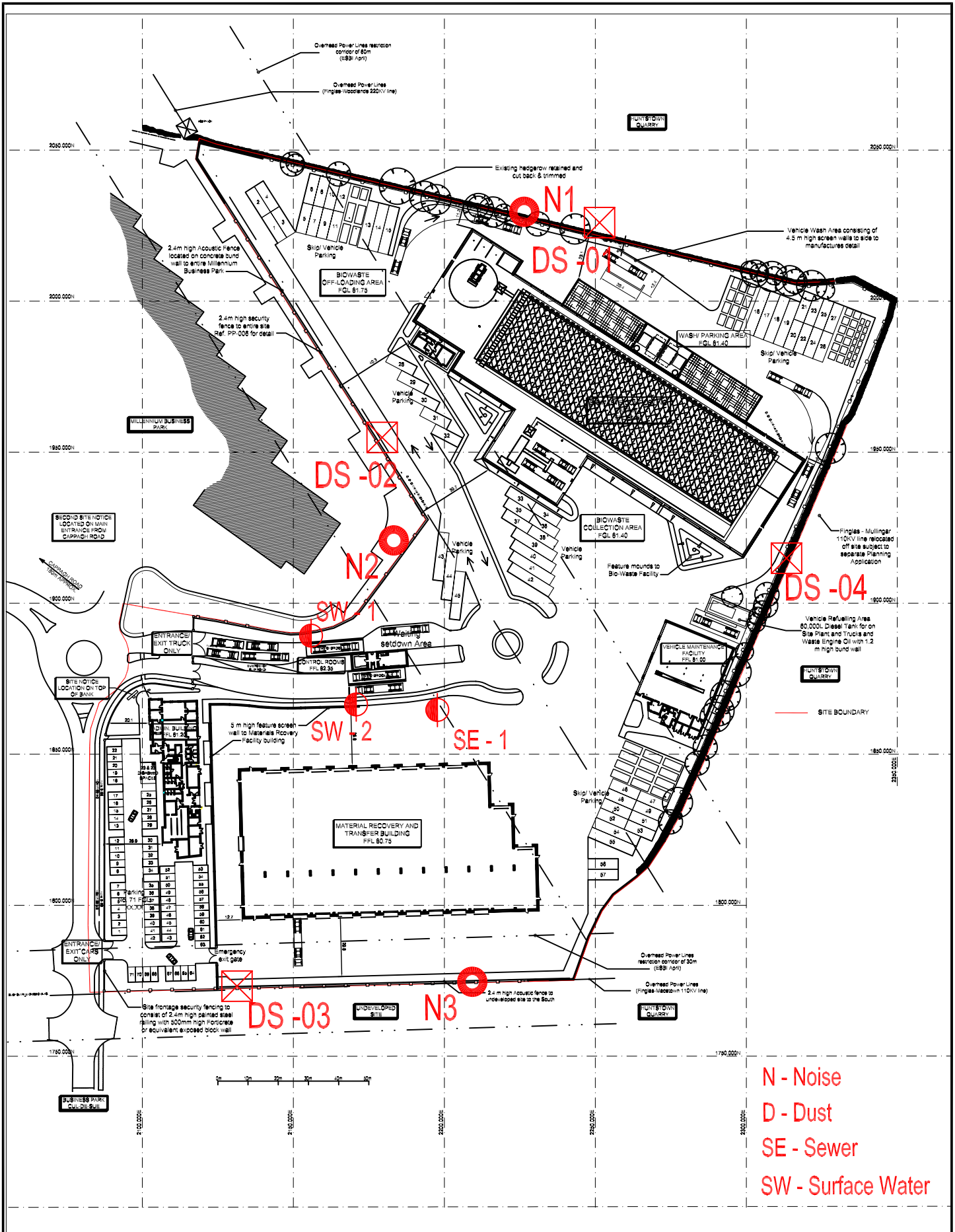
Out of the twelve recorded levels in 2009 there was just one exceedance of the deposition limit set in the licence ($350\text{mg}/\text{m}^2/\text{day}$) which occurred in June at DS-03 ($831\ \text{mg}/\text{m}^2/\text{day}$). All the other levels recorded were below the deposition limit set in the licence. The Agency was informed of the exceedance in a letter dated the 4th August 2009.

Gauge DS-03 is located at the southern boundary of the facility adjacent to a pre-cast cement production facility. It is considered likely that the activities on this adjoining property, which include stockpiling aggregates in open areas, have contributed to the elevated levels at DS-03. The majority (721 mg/m²/day) of the total dust at DS-03 (831 mg/m²/day) was inorganic which is consistent with the type of dust being generated on the adjoining property. This result is consistent with previous dust monitoring carried out at this location since the neighbouring activities began in 2006.

In general the dust monitoring programme has shown that the facility is not a significant source of dust.

Table 3.4 Dust Monitoring Results 2009

	June '09	July '09	August '09
DS-01	95	83	37
DS-02	241	406	82
DS-03	831	254	271
DS-04	174	338	69



N - Noise
D - Dust
SE - Sewer
SW - Surface Water



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CLIENT
 GREENSTAR LTD.

DETAILS

DRG. No.
 3.1

TITLE
 MONITORING LOCATIONS
 MILLENNIUM BUSINESS PARK

SCALE REV.
 NTS A

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Figure 3.2 Noise Sensitive Location



4. SITE DEVELOPMENT WORKS

4.1 Specified Engineering Works

There were no Specified Engineering Works carried out in 2009. In December 2009 Greenstar submitted a Specified Engineering Works proposal to the Agency for an extension to the processing lines to enable production of Solid Recovered Fuel (SRF) from the C&I and C&D waste streams.

Approval was received and the proposed works will occur in 2010. The works will be confined almost completely to the inside of the waste recovery building with the exception of an enclosed packer located outdoors. There will be no additional actual or potential environmental emissions as a result of the proposed changes.

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 Estimate of Resources Used On-Site

Resources	Quantities
Diesel (green)	66,000 litres
Electricity	1,554,832 Units
Hydraulic, Transmission & Engine Oil	2,085 litres
Truck Wash Detergent	100 litres
Mains Water	7,300 litres
Anti Freeze	40 litres
Natural Gas	54,075 Units

4.3 Bund Integrity Testing

Tank, drum, pipeline and bund testing is to be carried out every three years. The bunds were tested in May 2009 and the drains in January 2010 and were passed fit for purpose. The summary of the drain survey and the bund result sheet are included in Appendix 1.

5. WASTE RECEIVED AND CONSIGNED FROM THE FACILITY

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

The total quantity of waste received was 79,469.57 tonnes. The total waste consigned was 77,224.94 tonnes. Approximately 200 tonnes of waste remained on site at the end of 2009 which will be consigned in 2010. The remaining difference (approximately 2,044 tonnes or 2.5 % of the total) relates to the presence of rainwater in the open top skips brought on-site and also due to possible discrepancies with the two weighbridges over the year.

The recovery rate for the facility is estimated at 62.48 %. All the wastes consigned from the site went to recovery and disposal facilities agreed with the Agency.

Table 5.1 Waste Received & Consigned 2009

EWC	Description	Waste In	Waste Out
10 01 01	Ash	4.67	
10 03 05	LDF Alumina	7.41	
13 02 08*	Waste Oil		1.60
15 01 01	Cardboard Packaging	365.51	471.42
15 01 02	Plastic Packaging	3.96	
	Polystyrene	2.14	
15 01 03	Pallets	14.07	49.76
	Timber Packaging	0.80	
	Wood	239.48	
	Wooden Packaging	508.61	
15 01 06	Mixed Packaging	2,703.88	2,698.01
			8.76
16 05 04	Gas Cylinders		7.86
			1.34
17 01 07	C&D Inert Mixed	7,115.30	98.20
			340.08
			3,224.11
			193.98
			39.74
17 05 04	C&D Inert Mixed	4,267.98	46.14
			133.62
			21.28
			6.00
	Soil & Stones	576.29	27.54
			4,874.04
			2,823.54
			14.12
			347.38
19 09 05	Resin	16.34	
19 09 02	Sludge		5.04
19 12 04	Rubber		9.00
19 12 07	Wood	350.58	92.70
			625.84
			1,545.18
			21.28
			84.56
19 12 09	Fines C&I		27.12
			18.10
	Fines C&D		5,625.24
			12,957.54
			506.94
		2,335.20	
19 12 12	C&I Dry Mixed	13,279.58	1,777.94
			27,103.26
			269.06
			79.86
	MSW Municipal Mixed	47.40	19.40
20 01 01	Recy Paper	8.11	
	Cardboard & Paper	10.75	
20 01 02	Glass	2.64	

EWC	Description	Waste In	Waste Out
20 01 08	Kitchen and Canteen Waste	12.38	
20 01 11	Textile	7.10	
20 01 36*	Rec Electronics & Electrics	6.84	
20 01 38	Wood	1,350.40	5,388.25
			18.60
			40.60
			15.18
20 01 40	Metal	381.88	3,111.51
20 02 01	Green Biodegradable Waste	181.37	
	Green Mixed	5.66	
20 03 01	MSW Municipal Mixed	18,392.50	
20 03 07	C&I Dry Mixed	29,605.94	18.58
	Total Received	79,469.57	
	Total Consigned		77,224.94
	Total Recovered		48,299.12
	Total Disposed		28,925.82
	Recovery Rate		62.54%

Table 5.2 Waste Received & Consigned 2008

EWC	Description	Waste In	Waste Out
10 01 01	Ash	0.60	
10 01 23	Sludge		4.20
10 02 11*	Oil & Water		1.32
15 01 01	Cardboard Packaging	1,382.05	2,280.69
	Multi product load	3.90	133.68
15 01 02	Plastic Packaging	22.59	
	Polystyrene	4.83	
15 01 03	Pallets	16.76	62.16
	Wooden Packaging	499.98	22.03
	Timber Packaging	1.44	
15 01 06	Mixed Packaging	3,950.90	2,691.72
15 01 07	Glass Packaging	18.25	
16 05 04	Gas Cylinders		2.64
17 01 07	C&D Inert Mixed	3,735.84	12,106.80
			401.08
			4,421.32
			246.72
			70.80
17 05 04	C&D Inert Mixed	20,841.62	26.10
	Soil & Stones	447.93	448.60
			63.28
17 08 02	Plasterboard	7.92	
19 09 05	Resin	4.16	
19 09 02	Sludge		14.24
			11.72
19 12 04	Rubber	8.10	
19 12 07	Wood	3.42	
19 12 09	Fines C&I	15.56	27,369.28
			26.78
	Fines C&D		231.98
			12,157.32
			2,514.58
Minerals		73.84	
19 12 12	C&I Dry Mixed	33,326.96	35,209.92
			10,292.81
			878.56
	MSW Municipal Mixed	51.76	
20 01 01	Cardboard & Paper	15.01	24.04
	Newsprint	13.12	
	Recy Paper	52.79	
	Printers Mix Loose	3.36	
20 01 08	Compost	65.02	
20 01 38	Wood	3,276.46	31.44
			3,054.36
			6,274.26
			1,844.36
			420.14
			20.32
		1,211.94	
20 01 39	Plastic	0.69	
20 01 40	Metal	676.01	4,721.23

EWC	Description	Waste In	Waste Out
20 02 01	Green Biodegradable Waste	178.10	
	Green Mixed	0.36	
20 03 01	MSW Municipal Mixed	21,082.88	
20 03 07	C&I Dry Mixed	44,105.51	
	Total Received	133,813.88	
	Total Consigned		129,366.26
	Total Recovered		83,430.97
	Total Disposed		45,935.21
	Recovery Rate		64.49%

Table 5.3 Waste Received & Consigned

	2008	2007	2006
Total Received	133,813.88	167,056.84	79,570.21
Total Consigned	129,366.26	161,828.21	80,725.68
Total Recovered	83,430.97	109,492.71	53,646.88
Total Disposed	45,935.21	52,335.5	27,078.80
Recovery Rate	64.49%	67.66%	66.5%

6. ENVIRONMENTAL INCIDENTS AND COMPLAINTS

6.1 Incidents

The routine monitoring programme identified one incident during the reporting period, associated with an exceedance of the dust deposition limit as described in Section 3.4. The Agency was informed of the exceedance by letter in accordance with Condition 10.2.a) and 10.2.b) of the Licence. There were no other incidents in 2009.

6.2 Register of Complaints

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

7. ENVIRONMENTAL DEVELOPMENT & CONTROL

7.1 Environmental Management Programme Report

Greenstar has developed an Environmental Management System (EMS) for the facility. As part of this EMS Greenstar has developed a list of environmental, management, operating and maintenance procedures, in 2009 a dedicated system for the control of odours was implemented. A copy of the odour control plan and the list of procedures are included in Appendix 2. In 2009, the facility received OHSAS 18001: ISO 14001 accreditation.

7.1.1 Site Management Structure

Management and Staffing structure: -

Name: Aidan Shanahan

Responsibility: Head of MRF Operations

Experience: 6 years experience waste management experience; has completed the FÁS waste management course.

Name: Simon Kelly

Responsibility: Engineering Manager

Experience: 5 years experience; has completed the FÁS waste management course.

Name: Jimmy White

Responsibility: Operations Manager

Experience: 20 years experience; has completed the FÁS waste management course.

7.1.2 Staff Training

Staff training carried out during the year included first aid training, forklift training, scissors lift training and 360 excavator training. Details on staff training 2009 are included in Appendix 3.

7.2 Environmental Management Programme

7.2.1 Schedule of Objectives 2009

The objectives that were achieved during this reporting period are outlined in Table 7.1. Details on the progress made are also included on the table and an evaluation of what has been achieved to date is presented below.

Objective 1 - Improve Hazardous Waste Management on site

Lead-acid batteries are now segregated on-site in quarantine area and subsequently removed to an authorised facility. The oil quality for large shredders is monitored and oil change interval was increased from 2000 hrs to 3000 hrs

Objective 2 - Emergency Response Training

The number of fire wardens was not increased due to a control room operator position being made redundant.

Objective 3 - Improve housekeeping

Cleaning schedule given to Team Leader and ensure resources are available.

Objective 4 - Reduce the energy/fuel usage at the facility.

Energy and fuel usage has been reduced through increased awareness.

Objective 5 - Improve the maintenance area provided on-site

The maintenance area was moved in Q2 2009.

Objective 6 - Improve access to fixed plant and equipment

Additional walkways for plant access were constructed in Q3 2009.

7.2.2 Schedule of Objectives 2010

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

7.3 Communications Programme

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

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

Records available for public inspection on site include:-

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

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

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

Table 7.1 Objectives and Targets for 2009

No	Objective	Target	Responsibility	Progress
1	Improve Hazardous Waste Management on site	Arrange for the segregation collection of lead-acid batteries on-site in quarantine area. Arrange removal to an authorised outlet Monitor oil quality for large shredders to increase oil change interval from 2000 hrs to 3000 hrs	Facility Manager	Done Q2 2009
2	Emergency Response Training	Increase number of trained Fire Wardens to cover all Control Room Operator's from 2 to 3	Facility Manager	One CRO position made redundant in 2009
3	Improve housekeeping	Roll out cleaning schedule to Team Leader and ensure resources are available. Ensure resources (manpower) are available	Facility Manager	Done Q2 2009
4	Reduce the energy/fuel usage at the facility.	Review the provision of a fuel management system at the site for fuel security and to allow fuel efficiency review of plant and equipment. Monitor gas usage at least quarterly. Monitor water usage at least quarterly. Monitoring electricity usage at least quarterly.	Facility Manager	Not done – financial constraint. Energy and Fuel usage has been reduced through increased awareness
5	Improve the maintenance area provided on-site	Move the maintenance area	Facility Manager	Done Q2 2009
6	Improve access to fixed plant and equipment	Construct 4 additional walkways for plant access.	Facility Manager	Done Q3 2009

Table 7.2 Schedule 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.	Facility Manager	Ongoing
		Spill training, inclusive of a spill scenario to be carried out.		
2	Energy & Resource Consumption	Summarise energy and resource usage on a quarterly basis with a view to reducing consumption	Facility Manager	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.	Facility Manager	Ongoing
4	Pollution Prevention	Strive to ensure that monitoring results comply with the licence limits and investigate any exceedances of emission limit values.	Facility Manager	Ongoing
		Continue to ensure the integrity and maintenance of all drainage infrastructure.		
5	Nuisance control	Introduce bird control measures	Facility Manager	Q1 2010
		Monitor odour daily.		Ongoing
6	Hazardous Waste Management on site	Obtain Material Safety Data Sheets (MSDS) for all hazardous materials used on site.	Facility Manager	Q2 2010
		Set up contract with hazardous waste contractor for the removal of hazardous waste generated through maintenance.		
7	Recycling rate/landfill diversion	Introduce new equipment to increase landfill diversion, SRF production	Facility Manager	Q2 2010

7.4 Report Financial Provision

Greenstar has accrued over €3,000,000 in funds, to provide for any potential environmental liabilities at this facility. Greenstar also has adequate insurance cover for environmental liabilities to €6,350,000 for any one occurrence, which will apply to “sudden identifiable and unintended incidents”.

7.5 Nuisance Controls

Greenstar has contracted a vermin control company Pestgard to carry out nuisance control at the facility. Pestgard undertake a 6 weekly review of the vermin activity on-site along with an inspection of the bait traps that are located throughout the facility.

7.6 European Pollutant Release and Transfer Register Regulation

Under the European Pollutant Release and Transfer Register Regulation (EC) No. 166/2006 Greenstar are required to submit information annually to the Agency. A copy of the information submitted to the Agency via the web-based data reporting system is included in Appendix 4.

7.7 Rainwater and Wastewater Volumes

No rainwater was reused at the facility during the reporting period as the grey water reuse system has been de-commissioned. It is not possible to give an exact figure for the amount of wastewater produced during the reporting period. It is estimated that approximately 5 tonnes of wastewater/sludge was removed off site by Horizon Ltd in 2009 from the bund, interceptors and drainage lines cleaning programme. Approximately 1,000 m³ of water was used by the truck wash during the year.

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

8. OTHER REPORTS

In December 2009 Greenstar submitted a Specified Engineering Works proposal to the Agency for an extension to the processing lines to enable production of Solid Recovered Fuel (SRF) from the C&I and C&D waste streams.

APPENDIX 1

Bund Report Summary



Bund Test Report

Millennium
Park

EPA License W0183-01 3.11.5 requires all site bunds to be tested at least every 3 years.

Bund type	Concrete
Location	Service area NE corner of the site
Typical contents	Diesel oil storage tanks
Test date	26-28 May 09

Test Method for fixed/concrete bunds:

The bund and a control container are filled to a prescribed level with water and left to settle for a period of 2 days. The levels of water in the bunds and the control containers are taken each day.

The control container is used to evaluate the balance between the precipitation rate and the evaporation rate applicable during the period.

Date	Bund level	Control container level
26 May 09 (weather dry and hot)	105 cm	100 cm
27 May 09 (weather cloudy and drizzly)	103 cm	99 cm
28 May 09 (weather dry and cloudy)	105 cm	100 cm

Conclusions:

No leakage was observed in this bund and no water level drop was observed other than that consistent with the control container.

Bund integrity confirmed.

Simon Kelly, Greenstar, May 2009



Bund Test Report

Millennium
Park

EPA License W0183-01 3.11.5 requires all site bunds to be tested at least every 3 years.

Bund type	Concrete
Location	Back-up generator
Typical contents	Back-up generator
Test date	26-28 May 09

Test Method for fixed/concrete bunds:

The bund and a control container are filled to a prescribed level with water and left to settle for a period of 2 days. The levels of water in the bunds and the control containers are taken each day.

The control container is used to evaluate the balance between the precipitation rate and the evaporation rate applicable during the period.

Date	Bund level	Control container level
26 May 09 (weather dry and hot)	65 cm	137 cm
27 May 09 (weather cloudy and drizzly)	64 cm	136 cm
28 May 09 (weather dry and cloudy)	66 cm	137 cm

Conclusions:

No leakage was observed in this bund and no water level drop was observed other than that consistent with the control container.

Bund integrity confirmed.

Simon Kelly, Greenstar, May 2009



Bund Test Report

Millennium
Park

EPA License W0183-01 3.11.5 requires all site bunds to be tested at least every 3 years.

Bund type	Concrete
Location	Back-up generator
Typical contents	Diesel oil storage tank
Test date	26-28 May 09

Test Method for fixed/concrete bunds:

The bund and a control container are filled to a prescribed level with water and left to settle for a period of 2 days. The levels of water in the bunds and the control containers are taken each day.

The control container is used to evaluate the balance between the precipitation rate and the evaporation rate applicable during the period.

Date	Bund level	Control container level
26 May 09 (weather dry and hot)	43 cm	137 cm
27 May 09 (weather cloudy and drizzly)	42 cm	136 cm
28 May 09 (weather dry and cloudy)	44 cm	137 cm

Conclusions:

No leakage was observed in this bund and no water level drop was observed other than that consistent with the control container.

Bund integrity confirmed.

Simon Kelly, Greenstar, May 2009



Bund Test Report

Millennium
Park

EPA License W0183-01 3.11.5 requires all site bunds to be tested at least every 3 years.

Bund type	Metal/Plastic
Test date	28 May 09

Test Method for Metal/Plastic bunds:

The bunds are filled with water and left on a dry level surface for 2 hours. Any leakage will be seen on the ground around the bund and noted.

The day was dry and bright.

The bunds tested in this manner are as follows:

Location	Type	Designation	Test result
Workshop at south of MRF	Metal	Metal Bund 1	Bund integrity confirmed
Workshop at south of MRF	Metal	Metal Bund 2	Bund integrity confirmed
Oil container	Metal	Metal Bund 3	Bund integrity confirmed
Oil container	Metal	Metal Bund 4	Bund integrity confirmed
Oil container	Metal	Metal Bund 5	Bund integrity confirmed
Oil container	Plastic	Plastic bund 1	Bund integrity confirmed
Oil container	Plastic	Plastic bund 2	Bund integrity confirmed
GTT Workshop North of MRF	Plastic	Plastic bund 3	Bund integrity confirmed
Truck park area	Metal	Large Blue barrel bund	Bund integrity confirmed

Conclusions:

No leakage was observed in these bunds.

Bund integrity confirmed.

Simon Kelly, Greenstar, May 2009

Client:

Greenstar
Millenium Park
Ballycoolin
Dublin 11
Ireland

Site: As above

Contact: Simon Kelly

15.03.2010

RE: Summary Report of CCTV Drain Survey

Dear Simon

Overview

The drainage lines that have been CCTV surveyed were found to be in a good structural/serviceable condition and do not appear to require any further works at this stage.

Some of the drainage has been High pressure jet cleaned and all were left in a clean good flowing condition.

Thank you for the opportunity to undertake these works on your behalf if you should require any further works or quotes please do not hesitate to contact us.

Assuring you of our best endeavours at all times.

Yours sincerely,

Ed Ali
Operations Manager
Horizon Environmental Ltd.

APPENDIX 2

Odour Control Plan/Procedures List

MRF Odour Control Plan

The following is the odour control and monitoring plan from Greenstar Millennium Park.

Odour prevention/control:

The MSW collected by vehicles based in Greenstar Millennium Park will be handled as follows:

MSW tipped on the tipping floor will be re-loaded for onward disposal within 8 hours where practical.

Odour monitoring:


A daily odour monitoring check will be performed at Greenstar Millennium Park. It will record the strength and persistence of odour at a number of points around the MRF building. If any odour is detected, action will be taken by the Facility Manager or his deputy to investigate the source and eliminate the cause.

Odour mitigation will take the form of the application of Odour neutraliser in the affected area.

If the odour monitoring detects an odour nuisance after the application of the odour neutraliser then further mitigation measures must be considered.

End.

Procedures List

EHSMS Procedures List				
Ref.	SF 013	Iss. By	Don Gallagher / Olivier Gardelle	
Version	1	App. By	Oliver Callan / Malcolm Dowling	
Version	2 (01/08/09)	Changes	Update version number of documents	

Standard General Procedures SGPs - Titles		Number
Environmental Aspects and Health and Safety Risk Assessment		001 (v2)
Legislative and other requirements		002 (v1)
Objectives and Target, Management Programme		003 (v1)
Training		004 (v1)
Communication		005 (v2)
Document control		006 (v1)
Operational controls		007 (v1)
Emergency Response		008 (v1)
Performances, Measurement, Monitoring & Reporting		009 (v1)
Non-Conformance and Corrective action		010 (v1)
Records		011 (v1)
Management System Audit		012 (v1)
Environment, Health and Safety Management Manual		013 (v2)
Standard Operating Procedures SOPs - Titles		
Both – General maintenance		001 (v1)
Both - Resources and usage		002 (v1)
Yard - Facility inspection		003 (v1)
Yard - Mobile plant		004 (v1)
Yard - Forklift		005 (v1)
Yard - Nuisance management		006 (v1)
Yard - Odour monitoring and log		007 (v1)
Yard – Waste processing		008 (v1)
Yard - Operation of fixed plant		009 (v1)
Yard - Permits to work		010 (v1)
Yard - Lock-out (LOTO)		011 (v1)
Yard - Site rules		012 (v1)
Yard - Site closure		013 (v1)
Yard – MP cleaning procedure		014 (v1)
Yard – MP line running procedure		015 (v1)
Yard – MP picking procedure		016 (v1)
Both – Construction project – health and safety notification procedure		017 (v1)

APPENDIX 3

Staff Training Records

Training 2009 – Millennium Business Park – W0183-01

Alvydas Samsonas – April 09 – First Aid training

Ronan Healy – Jun 09 – Forklift

Laris Malinauskas - Jun 09 – Forklift

Ronan Healy – Jan 09 – Scissors lift training (MEWP)

Irmantas Pauza - Jan 09 – Scissors lift training (MEWP)

Laris Malinauskas – Feb 09 – 360 Excavator training

Eriks Zaherevics - Feb 09 – 360 Excavator training

APPENDIX 4

European Pollutant Release and Transfer Register



Environmental Protection Agency

| PRTR# : W0183 | Facility Name : Greenstar Recycling Holdings Ltd | Filename : W0183_2009.xls | Return Year : 2009 |

AER Returns Worksheet

Version 1.1.10

REFERENCE YEAR	2009
-----------------------	------

1. FACILITY IDENTIFICATION

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

Waste or IPPC Classes of Activity

No.	class_name
4.2	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).
3.11	Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.12	Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.13	Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.
4.11	Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule.
4.12	Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule.
4.13	Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.
4.3	Recycling or reclamation of metals and metal compounds.
4.4	Recycling or reclamation of other inorganic materials.
Address 1	Millennium Business Park
Address 2	Grange
Address 3	Ballycoolin
Address 4	Dublin 11
Country	Ireland
Coordinates of Location	-6.34044 53.4084
River Basin District	IEEA
NACE Code	3832
Main Economic Activity	Recovery of sorted materials
AER Returns Contact Name	Suzanne Byrne
AER Returns Contact Email Address	suzanne.byrne@greenstar.ie
AER Returns Contact Position	Environmental Executive
AER Returns Contact Telephone Number	01-2947949
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	01-2947900
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	0
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

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

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

Is it applicable?	No
Have you been granted an exemption ?	
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

4.1 RELEASES TO AIR

| PRTR# : W0183 | Facility Name : Greenstar Recycling Holdings Ltd | Filename : W0183_2009.xls | Return Year : 2009 |

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SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

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

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

SECTION B : REMAINING PRTR POLLUTANTS

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

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

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

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

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

Additional Data Requested from Landfill operators

For the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide summary data on landfill gas (Methane) flared or utilised on their facilities to accompany the figures for total methane generated. Operators should only report their Net methane (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 Recycling Holdings Ltd

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

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

4.2 RELEASES TO WATERS

| PRTR# : W0183 | Facility Name : Greenstar Recycling Holdings Ltd | Filename : W0183_2009.xls | Return Year : 2009 |

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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

RELEASES TO WATERS								
POLLUTANT		Method Used			QUANTITY			
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 PRTR POLLUTANTS

RELEASES TO WATERS								
POLLUTANT		Method Used			QUANTITY			
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 C : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

RELEASES TO WATERS								
POLLUTANT		Method Used			QUANTITY			
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	SW-2 Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
238	Ammonia (as N)	E	EN ISO 17025	Flow was estimated based on rainfall amount over the year and the area of the facility. The analysis was ISO accredited	18.772	18.772	0.0	0.0
303	BOD	E	EN ISO 17025	Flow was estimated based on rainfall amount over the year and the area of the facility. The analysis was ISO accredited	190.902	190.902	0.0	0.0
306	COD	E	EN ISO 17025	Flow was estimated based on rainfall amount over the year and the area of the facility. The analysis was ISO accredited	6419.093	6419.093	0.0	0.0
240	Suspended Solids	E	EN ISO 17025	Flow was estimated based on rainfall amount over the year and the area of the facility. The analysis was ISO accredited	536.913	536.913	0.0	0.0
314	Fats, Oils and Greases	E	EN ISO 17025	Flow was estimated based on rainfall amount over the year and the area of the facility. The analysis was ISO accredited	8.368	8.368	0.0	0.0
324	Mineral oils	E	EN ISO 17025	Flow was estimated based on rainfall amount over the year and the area of the facility. The analysis was ISO accredited	0.43	0.43	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

SECTION A : PRTR POLLUTANTS

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER									
POLLUTANT		METHOD			QUANTITY				
No. Annex II	Name	M/C/E	Method Used		Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	
			Method Code	Designation or Description					
						0.0	0.0	0.0	0.0

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

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

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER								
POLLUTANT		METHOD			QUANTITY			
Pollutant No.	Name	M/C/E	Method Used		SE-1 Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
			Method Code	Designation or Description				
238	Ammonia (as N)	E	EN ISO 17025	Based on an estimate of water used in the wheel wash and run off from the MRF building	18.69	18.69	0.0	0.0
303	BOD	E	EN ISO 17025	Based on an estimate of water used in the wheel wash and run off from the MRF building	205.5	205.5	0.0	0.0
306	COD	E	EN ISO 17025	Based on an estimate of water used in the wheel wash and run off from the MRF building	521.0	521.0	0.0	0.0
240	Suspended Solids	E	EN ISO 17025	Based on an estimate of water used in the wheel wash and run off from the MRF building	595.8	595.8	0.0	0.0
314	Fats, Oils and Greases	E	EN ISO 17025	Based on an estimate of water used in the wheel wash and run off from the MRF building	8.711	8.711	0.0	0.0
332	Ortho-phosphate (as PO4)	E	EN ISO 17025	Based on an estimate of water used in the wheel wash and run off from the MRF building	0.19	0.19	0.0	0.0
308	Detergents (as MBAS)	E	EN ISO 17025	Based on an estimate of water used in the wheel wash and run off from the MRF building	5.28	5.28	0.0	0.0
343	Sulphate	E	EN ISO 17025	Based on an estimate of water used in the wheel wash and run off from the MRF building	310.46	310.46	0.0	0.0

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

4.4 RELEASES TO LAND

| PRTR# : W0183 | Facility Name : Greenstar Recycling Holdings Ltd | Filename : W0183_2009.xls | Return Year : 2009 |

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SECTION A : PRTR POLLUTANTS

RELEASES TO LAND							
POLLUTANT		METHOD			QUANTITY		
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0.0	0.0	0.0

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

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

RELEASES TO LAND							
POLLUTANT		METHOD			QUANTITY		
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0.0	0.0	0.0

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

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

| PRTR# : W0183 | Facility Name : Greenstar Recycling Holdings Ltd | Filename : W0183_2009.xls | Return Year : 2009 |

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Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility	Haz Waste : Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used		Non	Non Haz Waste: Address of Recover/Disposer	Non		
Within the Country	13 02 08	Yes	1.6	Waste Oil	D9	M	Weighed	Offsite in Ireland	Enva Ireland Ltd.,W0184-01		Clonminam Industrial Estate,...Portlaoise,Laois,Ireland	Enva Ireland Ltd.,W0184-01	Clonminam Industrial Estate,...Portlaoise,Laois,Ireland
Within the Country	15 01 01	No	471.42	Cardboard Packaging	R3	M	Weighed	Offsite in Ireland	Baileys Waste Paper,WPT(1)B		Rosemount Business Park,Blanchardstown,Dublin 16,...,Ireland		
Within the Country	15 01 03	No	49.76	Pallets	R3	M	Weighed	Offsite in Ireland	Max Pallets,Not Required		Colemanstown,Rathcoole,Co. Dublin,...,Ireland		
Within the Country	15 01 06	No	2698.01	Mixed Packaging	R13	M	Weighed	Offsite in Ireland	Greenstar Recycling,W0053-03		Fassaroe,Bray,Co. Wicklow,...,Ireland		
Within the Country	15 01 06	No	8.76	Mixed Packaging	R13	M	Weighed	Offsite in Ireland	Panda Waste,W0140-04		Rathdrinagh,Beauparc,Navan,Co. Meath,Ireland		
Within the Country	16 05 04	Yes	7.86	Gas Cylinders	R4	M	Weighed	Offsite in Ireland	BOC Gas,Not Required		Bluebell Industrial Estate,Dublin 12,...,Ireland	BOC Gases,Not Required,Bluebell Industrial Estate,Dublin 12,...,Ireland	Bluebell Industrial Estate,Dublin 12,...,Ireland
Within the Country	16 05 04	Yes	1.34	Gas Cylinders	R4	M	Weighed	Offsite in Ireland	Flo Gas Ltd.,Not Required		Drogheda,Co. Louth,...,Ireland	Flo Gas Ltd.,Not Required,Drogheda,Co. Louth,...,Ireland	Drogheda,Co. Louth,...,Ireland
Within the Country	17 01 07	No	98.2	C&D Inert Mixed	R5	M	Weighed	Offsite in Ireland	Francis Macken,N/A		Dublin,...,Ireland		
Within the Country	17 01 07	No	340.08	C&D Inert Mixed	R5	M	Weighed	Offsite in Ireland	Huntstown Quarry/Roadstone,WPT108		Huntstown,Co. Dublin,...,Ireland		
Within the Country	17 01 07	No	3224.11	C&D Inert Mixed	R5	M	Weighed	Offsite in Ireland	M&J's Recycling Services Ltd.,N/A		Sandyhills,St. Margarets,Co. Dublin,...,Ireland		
Within the Country	17 01 07	No	193.98	C&D Inert Mixed	R5	M	Weighed	Offsite in Ireland	Peter Moore,N/A		Priestown,Ardcath,Co. Dublin,...,Ireland		
Within the Country	17 01 07	No	39.74	C&D Inert Mixed	R5	M	Weighed	Offsite in Ireland	Seamus Lawless,N/A		Adamstown,Garristown,Co. Dublin,...,Ireland		
Within the Country	17 05 04	No	46.14	C&D Inert Mixed	R5	M	Weighed	Offsite in Ireland	KTK Landfill,W0081-01		Kilcullen,Co. Kildare,...,Ireland		
Within the Country	17 05 04	No	133.62	C&D Inert Mixed	R5	M	Weighed	Offsite in Ireland	M&J's Recycling Services Ltd.,N/A		Sandyhills,St. Margarets,Co. Dublin,...,Ireland		
Within the Country	17 05 04	No	21.28	C&D Inert Mixed	R5	M	Weighed	Offsite in Ireland	Peter Moore,N/A		Priestown,Ardcath,Co. Dublin,...,Ireland		
Within the Country	17 05 04	No	6.0	C&D Inert Mixed	R5	M	Weighed	Offsite in Ireland	Philip Brennan,N/A		Lodge,Cliven,Dunleer,Co. Louth,Ireland		
Within the Country	17 05 04	No	27.54	C&D Inert Mixed	R5	M	Weighed	Offsite in Ireland	Tom Davis,N/A		69 The Vines,Duleek,Co. Meath,...,Ireland		
Within the Country	17 05 04	No	4874.04	Soil & Stones	R5	M	Weighed	Offsite in Ireland	KTK Landfill,W0081-01		Kildare,...,Ireland		
Within the Country	17 05 04	No	2823.54	Soil & Stones	R5	M	Weighed	Offsite in Ireland	Knockharley Landfill,W0146-01		Kentstown,Navan,Co. Meath,...,Ireland		
Within the Country	17 05 04	No	14.12	Soil & Stones	R5	M	Weighed	Offsite in Ireland	Philip Brennan,N/A		Lodge,Cliven,Dunleer,Co. Louth,Ireland		
Within the Country	17 05 04	No	347.38	Soil & Stones	R5	M	Weighed	Offsite in Ireland	Ballynagran Landfill,W0165-01		Coolbeg & Kilcandra,Co. Wicklow,...,Ireland		
Within the Country	19 09 02	No	5.04	Sludge	D8	M	Weighed	Offsite in Ireland	Horizon Environmental,CPD 277-2		Park,Old Airport Road,Cloghran,Co. Dublin,Ireland		

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility	Haz Waste : Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility	Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used		Non	Non Haz Waste: Address of Recover/Disposer				
Within the Country	19 12 04	No	9.0	Rubber	R3	M	Weighed	Offsite in Ireland	Crumb Rubber,WP2007-01		Mooretown, Dromiskin, Dundalk, Co. Louth, Ireland			
Within the Country	19 12 07	No	92.7	Wood	R3	M	Weighed	Offsite in Ireland	Eirebloc Ltd.,CK (S) 503/07		Lissarda, Co. Cork, ,Ireland			
Within the Country	19 12 07	No	625.84	Wood	R3	M	Weighed	Offsite in Ireland	KTK Landfill,W0081-01		Kildare, ,Ireland			
Within the Country	19 12 07	No	1545.18	Wood	R3	M	Weighed	Offsite in Ireland	Knockharley Landfill,W0146-01		Kentstown, Navan, Co. Meath, ,Ireland			
Within the Country	19 12 07	No	21.28	Wood	R3	M	Weighed	Offsite in Ireland	Ormonde Organics Ltd.,W0237-01		Estate, Rathcoole, Co. Dublin, ,Ireland			
Within the Country	19 12 07	No	84.56	Wood	R3	M	Weighed	Offsite in Ireland	Ballynagran Landfill,W0165-01		Coolbeg & Kilcandra, Co. Wicklow, ,Ireland			
Within the Country	19 12 09	No	27.12	Fines C&I	R5	M	Weighed	Offsite in Ireland	KTK Landfill,W0081-01		Kildare, ,Ireland			
Within the Country	19 12 09	No	18.1	Fines C&I	R13	M	Weighed	Offsite in Ireland	Panda Waste,W0140-04		Rathdrinagh, Beauparc, Navan, Co. Meath, Ireland			
Within the Country	19 12 09	No	5625.24	Fines C&D	R5	M	Weighed	Offsite in Ireland	KTK Landfill,W0081-01		Kildare, ,Ireland			
Within the Country	19 12 09	No	12957.54	Fines C&D	R5	M	Weighed	Offsite in Ireland	Knockharley Landfill,W0146-01		Kentstown, Navan, Co. Meath, ,Ireland			
Within the Country	19 12 09	No	506.94	Fines C&D	R13	M	Weighed	Offsite in Ireland	Panda Waste,W0140-04		Rathdrinagh, Beauparc, Navan, Co. Meath, Ireland			
Within the Country	19 12 09	No	2335.2	Fines C&D	R5	M	Weighed	Offsite in Ireland	Ballynagran Landfill,W0165-01		Coolbeg & Kilcandra, Co. Wicklow, ,Ireland			
Within the Country	19 12 12	No	1777.94	C&I Dry Mixed	D5	M	Weighed	Offsite in Ireland	Bord Na Mona,W0201-02		Drehid Landfill, Drehid ,Co. Kildare, ,Ireland			
Within the Country	19 12 12	No	27103.26	C&I Dry Mixed	D5	M	Weighed	Offsite in Ireland	Knockharley Landfill,W0146-01		Kentstown, Navan, Co. Meath, ,Ireland			
Within the Country	19 12 12	No	269.06	C&I Dry Mixed	R13	M	Weighed	Offsite in Ireland	Greenstar Recycling,W0053-03		Fassaroe, Bray, Co. Wicklow, ,Ireland			
Within the Country	19 12 12	No	79.86	C&I Dry Mixed	R13	M	Weighed	Offsite in Ireland	Panda Waste,W0140-04		Rathdrinagh, Beauparc, Navan, Co. Meath, Ireland			
Within the Country	19 12 12	No	19.4	C&I Dry Mixed	D5	M	Weighed	Offsite in Ireland	Ballynagran Landfill,W0165-01		Coolbeg & Kilcandra, Co. Wicklow, ,Ireland			
Within the Country	19 12 12	No	100.44	MSW Municipal Mixed	R13	M	Weighed	Offsite in Ireland	Panda Waste,W0140-04		Rathdrinagh, Beauparc, Navan, Co. Meath, Ireland			
Within the Country	20 01 38	No	5388.25	Wood	R3	M	Weighed	Offsite in Ireland	Eirebloc Ltd.,CK (S) 503/07		Lissarda, Co. Cork, ,Ireland			
Within the Country	20 01 38	No	18.6	Wood	R3	M	Weighed	Offsite in Ireland	KTK Landfill,W0081-01		Kildare, ,Ireland			
Within the Country	20 01 38	No	40.6	Wood	R3	M	Weighed	Offsite in Ireland	Knockharley Landfill,W0146-01		Kentstown, Navan, Co. Meath, ,Ireland			
Within the Country	20 01 38	No	15.18	Wood	R13	M	Weighed	Offsite in Ireland	Panda Waste,W0140-04		Rathdrinagh, Beauparc, Navan, Co. Meath, Ireland			
Within the Country	20 01 40	No	3111.51	Metal	R4	M	Weighed	Offsite in Ireland	Davis Recycling Ltd.,WP 98067		Pigeon House Road, Ringsend, Dublin 4, ,Ireland			
Within the Country	20 03 07	No	18.58	C&I Dry Mixed	D5	M	Weighed	Offsite in Ireland	Bord Na Mona,W0201-02		Drehid Landfill, Drehid ,Co. Kildare, ,Ireland			

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