



ANNUAL ENVIRONMENTAL REPORT
FOR GREENSTAR LTD.
DEEP WATER QUAY SLIGO
LICENCE NO. W0058-01
JANUARY 2011 – DECEMBER 2011

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

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Project		Annual Environmental Report 2011		
Client		Greenstar Ltd. W0058-01		
Report No	Date	Status	Prepared By	Reviewed By
0481005	14/03/2012	Draft	Michael Watson MA	Mr Barry Sexton MSc
0481005	29/03/2012	Final	Michael Watson MA	Mr Barry Sexton MSc

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1. INTRODUCTION

This is the 2011 Annual Environmental Report (AER) for the Greenstar Ltd. (Greenstar), Materials Recovery & Transfer facility (MRF) at Deep Water Quay, Sligo. The AER covers the period from the 1st January 2011 to the 31st December 2011.

The content is based on Schedule B of the Waste Licence (Reg. No. W0058-01) and the report format follows guidelines set in the “Guidance Note for Annual Environmental Report” issued by the Environmental Protection Agency (Agency)¹. Account is also taken of the more recent AER Draft Guidance Document issued in January 2012.

¹ EPA (Environmental Protection Agency) 1999 Waste Licensing – Draft Guidance on Environmental Management Systems and Reporting to the Agency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 is located at Deepwater Berths Road, approximately 1.5 km northwest of Sligo town centre and 1 km from a relief road linking the N4 to the N15.

The licensed area, which encompasses approximately 11,000 m² and is accessed off the Deepwater Berths Road, is occupied by one waste transfer building, site offices, open yard areas and a civic amenity area.

The main building encompasses approximately 2,322 m² and is divided into three bays. The site offices, which are located beside the main entrance, comprise a two storey building encompassing approximately 84 m². The north western yard is paved with concrete and provides access to the waste processing building. The south-eastern yard is also paved and comprises the civic amenity area and an open paved yard area.

2.2 Waste Management Activities

The facility is licensed to accept 100,000 tonnes per annum of household waste, commercial waste, industrial non-hazardous waste and construction and demolition waste for processing and/or transfer for disposal or recovery.

2.2.1 Waste Types

The facility is licensed to accept the following waste types: -

Household (41,400 tonnes);

Commercial (4,600 tonnes);

Industrial Non-hazardous (45,000 tonnes);

Construction & Demolition (C&D) (9,000 tonnes);

No hazardous wastes or liquid waste are accepted.

Waste, bulking and segregation take place inside the waste transfer building, as specified in Condition 5.1 of the Licence and include:

Segregation of recyclable material (paper, cardboard, plastic, wood, aluminium cans);

Baling of segregated materials;

Sorting and segregation of C&D waste;

Bulking up of Municipal Solid Waste;

Transfer of recovered and residual materials to appropriately licensed recycling, recovery and disposal outlets.

Household Waste

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

Commercial and Industrial Waste

Both mixed and segregated commercial waste is collected from commercial outlets. Commercial waste containing many recyclable waste streams (paper, cardboard, glass, metal, green waste and wood) is delivered to the facility both by permitted third party hauliers and by Greenstar vehicles. Plastic, card and paper are baled and stored prior to transfer to a suitable permitted/licensed off-site recycling outlet. Biodegradable wastes suitable for composting which are accepted at the facility are sent to an offsite composting facility. The remaining non-recyclable material is bulked and sent to appropriately licensed landfills.

C&D Waste

Waste loads include mixed construction and demolition wastes and soil and stone. The material is accepted and weighed at the facility in skips of varying sizes. The waste loads are inspected and then bulked. The majority of the incoming C&D material is recovered and sent off-site either for re-use or recycling. The non-recyclable elements of this waste stream are transferred to a licensed landfill.

Civic Amenity Area

The civic amenity area is located to the south-east of the waste transfer building and has its own dedicated entrance for members of the public. There are a number of dedicated closed 14 yard skips for MSW, dry recyclables (cardboard, plastics, metals, papers etc) and WEEE.

2.2.1 Plant List

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

Table 2.1 Plant List – 2011

No.	Plant	Model	Operational Capacity	Standby Capacity
1	Baler	Boa	7t/hr	7t/wk
1	Paper Shredder	Alleghney	500kg/hr	500kg/hr
5	Trucks	Skip Trucks *3	60hr/wk	-
		Refuse Trucks *4	60hr/wk	-
1	Hook Lifter	Scania	65hr/wk	-
1	Loading Shovel	Caterpillar 938G	70t/hr	-
1	Fork Lift	Yale x2	65hr/wk	-
	Trommel	Powerscreen	60t/hr	
1	Grab	Fuchs MHL340	25t/hr	-
1	Weighbridge	Avery Weightronic	46hr/wk	-

3. EMISSION MONITORING

Greenstar implements a comprehensive environmental monitoring programme to assess the significance of emissions from site activities as per Schedule E of the Waste Licence. The programme includes surface water, foul water, groundwater, noise, landfill gas and dust monitoring. The monitoring locations are shown on Figure 3.1.

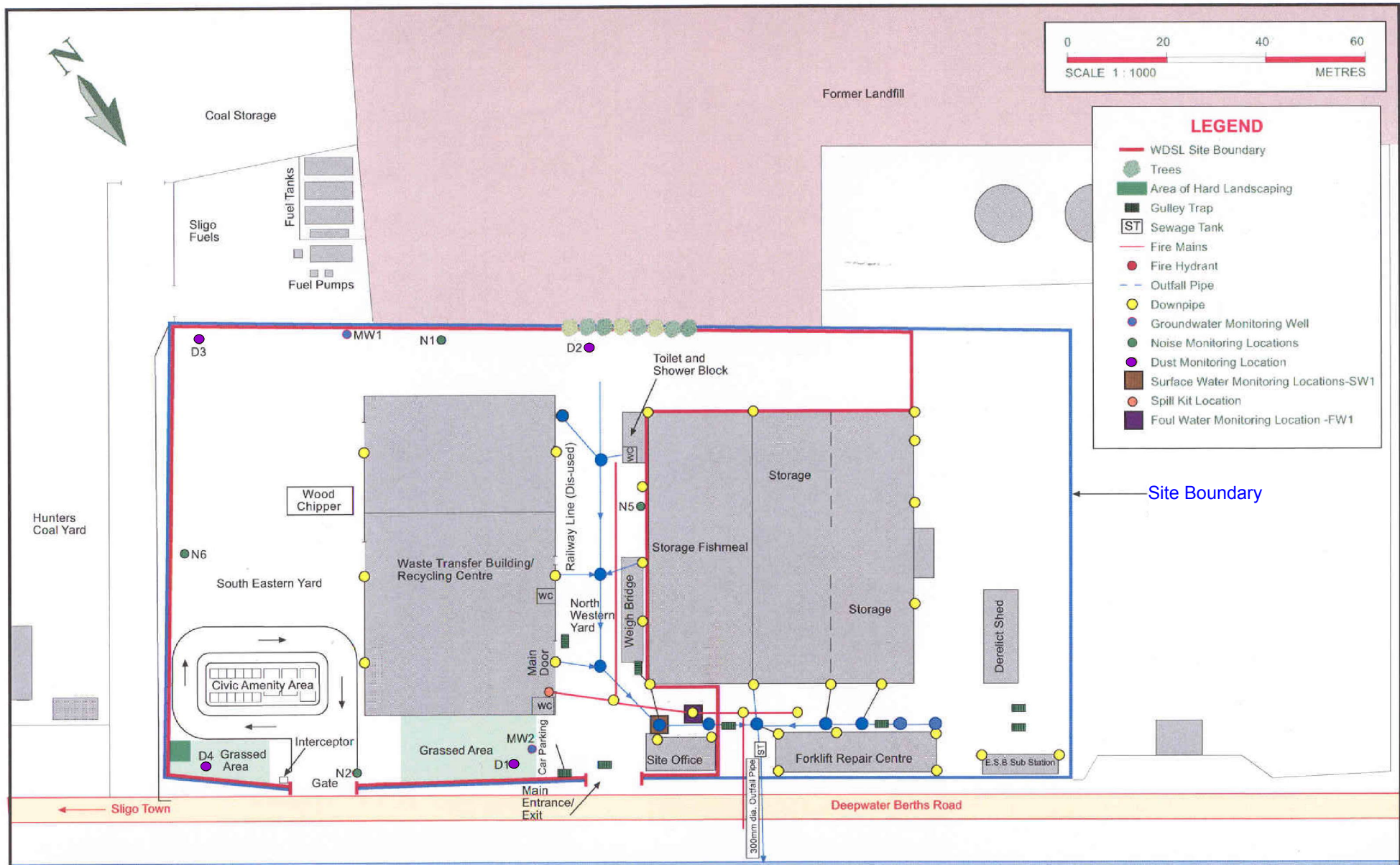
The fully certified monitoring results are submitted to the Agency at quarterly intervals. An overview of the results of the monitoring is presented in this Section.

3.1 Surface Water Monitoring

The surface water drainage system, serving roofed and open yard areas, discharges via a silt trap and petrol/oil interceptor to the Garavogue River. The interceptor and drains are cleaned when required.

Surface water monitoring is carried out in accordance with Condition 9.2 and Schedule E of the licence at quarterly intervals at the final discharge point (SE-2). The range of analysis is as specified in Schedule E and includes pH, electrical conductivity, Chemical Oxygen Demand (COD), Biological Oxygen Demand (BOD), ammoniacal nitrogen, chloride, surfactants, total suspended solids (TSS), mineral oils, oils, fats and greases and total and faecal coliforms.

The results are shown on Table 3.1. The surface water discharge from the facility is of good quality. The ELVs were not exceeded on any occasion during the monitoring period.



O'Callaghan Moran & Associates.
 Granary House, Rutland Street,
 Cork Ireland.
 Tel. (021) 4321521 Fax. (021) 4321522
 email : info@ocallaghanmoran.com

CLIENT

Greenstar Ltd

Details

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FIGURE NUMBER

3.1

TITLE

Monitoring Locations

Scale

Not To Scale

Revision

A

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Table 3.1 Surface Water Results for 2011

Parameter	Units	SE-2 Q1	SE-2 Q2	SE-2 Q3	SE-2 Q4	Emission Limit
pH	pH units	7.88	7.48	7.3	6.9	6 – 9
Conductivity	mS/cm	0.650	0.550	0.740	0.630	N/A
Chloride	mg/l	4.2	76	18.5	38	N/A
Ammoniacal Nitrogen	mg/l	0.17	0.33	0.557	1.3	N/A
COD	mg/l	59	56	29	32	N/A
BOD	mg/l	14	15	11	10	20
Total Suspended Solids	mg/l	15	<10	18	17	30
Surfactants	mg/l	0.5	0.6	0.006	<0.002	N/A
Mineral Oils	mg/l	NDP	<0.01	0.163	<0.01	N/A
Oils, Fats & Greases	mg/l	NDP	<0.01	<2	<2	10
Faecal Coliforms	mpn/100 ml	-	1900	-		-
Total Coliforms	mpn/100 ml	-	8700	-		-

N/A - not applicable

3.2 Groundwater Monitoring

There are no direct or indirect emissions to ground from the facility. Groundwater monitoring is carried out annually at two locations (MW1 and MW2) shown on Figure 3.1. MW1 is located on the southern boundary of the site in an open paved yard area, and MW2 is located on the northern boundary near the main entrance to the site. MW1 is upgradient of site activities, while MW2 is downgradient.

The laboratory analysis included the annual range of parameters specified in Schedule E of the licence. The sampling and analysis was carried out in accordance with recognised quality assurance and control procedures. The parameters were ammoniacal nitrogen, BOD, chloride, mineral oils, pH, faecal coliforms and total coliforms.

There are no ELVs or trigger limits set in the licence. The results are compared to the Interim Guideline Values (IGV) on groundwater quality published by the Agency. The summary results for 2011 are shown on Table 3.2.

Elevated levels of ammoniacal nitrogen, BOD, mineral oils and coliforms were detected in the upgradient well (MW-1). Elevated levels of chloride and ammoniacal nitrogen were detected in the downgradient well (MW-2).

The elevated ammoniacal nitrogen and chloride may be attributable to a former landfill (the closed Finisklin landfill is located immediately west of and hydrologically up gradient of the facility) and the effects of salt water intrusions beneath the site from the estuary. The elevated levels of mineral oils recorded at MW1 are attributed to a neighbouring kerosene and diesel Distribution Centre approximately 5 m from the site's southern boundary.

Oil contamination was initially detected in MW1 in 2006 and it has persisted. Greenstar informed the distribution centre, the Agency and Sligo County Council of the discovery of the oil contamination.

Table 3.2 Groundwater Monitoring Results May 2011

Parameter	Units	MW1	MW2	IGV
pH	pH units	7.3	7.66	6-9
Chloride	mg/l	18.6	92.3	30
Ammoniacal Nitrogen	mg/l	1.10	4.11	0.15
BOD	mg/l	750	24	-
Mineral Oils	mg/l	670	<0.01	0.01
Faecal Coliforms	cfu/100ml	2400	<1	0
Total Coliforms	cfu/100ml	1990	27	0

3.3 Foul Water Monitoring

Foul water is generated by floor runoff in the transfer building and sanitary discharges. In July 2010 and following agreement with the Agency the drainage system was connected to the Sligo County Council municipal sewer, which connects to the municipal waste water treatment plant located approximately 500 m from the facility. Monitoring is carried out at one location (SE-1), the final discharge point from the facility. Foul water monitoring is carried out quarterly in accordance with Condition 9.2 and Schedule E of the licence. The sampling location is shown on Figure 3.1. The monitoring results are presented on Table 3.3.

The range of analysis was as specified in Schedule E of the Waste Licence and includes pH, BOD, COD, ammoniacal nitrogen, chloride, detergents, total suspended solids, mineral oils, oils, fats and greases, total coliforms and faecal coliforms. The sampling and analysis was carried out in accordance with recognised quality assurance and control procedures.

The ELVs set in the licence are based on a direct discharge to the Garavogue River. As the discharge to the river has stopped, the Licence ELVs are no longer applicable. In approving the connection to the municipal sewer, the sanitary authority set discharge limits and these are included in Table 3.3.

Table 3.3 Foul Water Monitoring Results for 2011

Parameter	Units	SE-1	SE-1	SE-1	SE-1	Sanitary Authority Emission Limits
		Q1	Q2	Q3	Q4	
pH	pH units	8.43	8.06	7.0	7.5	6 – 10
Temperature	°C	12.5	12	14.0	13.0	42
Conductivity	mS/cm	0.850	0.775	0.910	0.875	-
Chloride	mg/l	14	5	30	24	3,000
Ammoniacal Nitrogen	mg/l	34	18	38	84	6,000
COD	mg/l	25.6	17.5	21.5	69	-
BOD	mg/l	3.04	2.23	3.97	16.7	100
Total Suspended Solids	mg/l	16	30	14	24	1,250
Surfactants	mg/l	0.6	<0.2	0.006	0.015	100
Mineral Oils	mg/l	<0.01	<0.01	2	<2	100
Oils, Fats & Greases	mg/l	<0.01	<0.01	<0.01	<0.122	10
Faecal Coliforms	cfu/100ml	-	1,100	-	-	-
Total Coliforms	cfu/100ml	-	12,000	-	-	-

-- Not Applicable

3.4 Noise Survey

All waste processing is carried out internally which provides significant attenuation for noise emissions from waste processing. The annual noise survey was carried out on the 31st August 2011 in accordance with Schedule E of the licence. Monitoring was carried out at the four noise monitoring locations, N-1, N-2, N-5 and N-6 specified in the licence and shown on Figure 3.1. The results are summarised on Table 3.4. The survey concluded that the facility was fully compliant with its licence requirements.

The nearest sensitive receptors to the facility are private residences located approximately 200 m to the east of the facility across the Garavogue River at Cartron, Sligo. There are also some individual residences located close to the Finiskiln Industrial Estate approximately 200 m south of the facility. An inspection undertaken by the acoustic consultant in the vicinity of the nearest sensitive locations prior to the onsite noise survey indicated that noise emissions from the study site were not audible or discernible at these locations.

Table 3.4 Noise Monitoring Results 2011

Station	Time	L _{Aeq 30} min dB	L _{AF10 30} min dB	L _{AF90 30} min dB	Specific level* dB	Noise audible
N1	1446- 1516	54	57	47	54	Grab in building continuously audible and dominant, except when trucks, cars and vans manoeuvring on yard. Road traffic outside entrance audible during site lulls. Bird calls.
N2	1552- 1622	63	65	56	61	Operations in building almost continuously audible at low level. Civic amenity site emissions dominant, arising from user's vehicles and items being disposed in bins, chiefly bottles. Also from clamp truck use 1613-1618. Occasional truck movements in nearest yard also audible. Intermittent road traffic outside entrance dominant when present. Low altitude light aircraft passing x1.
N5	1414- 1444	65	68	54	65	Truck, car and van movements through entrance, weighbridge area and around local yard dominant when present. Loader audible within building, and grab from 1431. Cardboard baler audible during lulls in other sources. Passing road traffic outside entrance also audible.
N6	1519- 1549	59	63	45	58	Operations in building almost continuously audible and dominant, chiefly grab and loader. Occasional truck movements in local yard dominant when present. Intermittent vehicle movements on access road outside boundary significant when present. Bird calls.

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

3.5 Dust Monitoring

There are significant off-site sources of dust in the vicinity of the facility which is located in an industrial area of Sligo Port. In dry weather conditions Greenstar dampen down access roads and the paved yards. Dust monitoring was carried out three times during the year in accordance with Schedule E of the licence at four on-site locations (D1, D2, D3 and D4) as shown on Figure 3.1. The licence requires that two of these monitoring events be carried out between May and September. Dust monitoring was carried out in June, July and December 2011. The results of the dust monitoring are summarised in Table 3.5.

The dust deposition limit (350 mg/m²/day) was exceeded in June at D3. The limit was not exceeded at any other monitoring location during the reporting period. An open coal storage and distribution depot is to the west and south west of the Greenstar facility, with coal stockpiles close to monitoring location D3. When collecting the gauge, OCM noted the presence of black dust in each of the gauges including location D3 and this is also noted in the laboratory report.

Table 3.5 Dust Monitoring Results 2011

	June '11 mg/m ² /day	July '11 mg/m ² /day	December '11 mg/m ² /day	Deposition Limit mg/m ² /day
D1	*	231.94	161.52	350
D2	264	97.05	33.82	350
D3	514	128.86	85.43	350
D4	161	128.86	47.13	350

* - Vandalised not suitable for analysis

3.6 Landfill Gas Monitoring

The annual gas monitoring programme was carried out in accordance with Schedule E of the licence and included measurements of methane, carbon dioxide, oxygen and atmospheric pressure from the two groundwater monitoring wells (MW1 & MW2) and the facility office in 22nd February 2011. There are no emission limits set in the waste licence. Carbon dioxide and methane were not detected at any of the monitoring locations. There is no evidence that landfill gas is present in the soils beneath the facility.

OCM carried out the gas measurements using a Gas Data LSMx gas analyser. The meter was calibrated before use. The detection limit is 0.1% for methane, carbon dioxide and oxygen. The results are shown on Table 3.6.

Table 3.6 Landfill Gas Monitoring Results 2011

LANDFILL GAS MONITORING FORM				Baseline		Ambient	x
Site Name: Greenstar Ltd. – Sligo Depot				Site Address: Greenstar, Sligo.			
Operator: GREENSTAR				National Grid Reference:			
Site Status: Operational				Date: 22/02/2011			
Instrument used: Gas Data LMSx		Normal Analytical Range: 0 – 100%					
Monitoring Personnel: OCM				Weather: Dry, Mild			
Results							
Sample ID	Borehole/spike/other	CH ₄ (% v/v)	CO ₂ (% v/v)	O ₂ (% v/v)	Barometric Pressure (mb)	Comment	
MW1	Borehole	0.0	0.1	18.9	1011		
MW2	Borehole	0.0	0.1	20.3	1011		
OFFICE	-	0.0	0.1	21.0	1011		

4. SITE DEVELOPMENT WORKS

4.1 Engineering Works

No site development works were proposed for 2011 and none carried out. There are no proposed development works planned for 2012. The facility has sufficient plant capacity to handle the volumes of waste accepted at the facility. It is not expected that the existing methods, processes, waste types accepted and operating procedures will not be altered significantly in 2012. The Agency will be notified of all specified engineering works as per Condition 4.18 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 2011.

Table 4.1 Estimates of Resources Used On-Site

Resources	Quantities
Vehicle Diesel	142,189 litres
Diesel (green)	25,648 litres
Electricity	112,276 kwh
Hydraulic & Engine Oil	800 litres

5. WASTE RECEIVED AND CONSIGNED FROM THE FACILITY

Table 5.1 shows the quantities of wastes accepted and consigned for the period January 2011 to December 2011. A more detailed description of the wastes received and consigned in 2011 is presented in the PRTR submission in Appendix 1. The total quantity of waste received was 23,862 tonnes and the total waste consigned was 24,982 tonnes. For comparative purposes the amounts of waste received and consigned from 2003 to 2010 are presented in Tables 5.2 and 5.3. As per Condition 5.8 of the licence all the wastes consigned from the site went to recovery and disposal facilities as agreed with the Agency and a copy of the relevant Facility Permit or Waste Licences retained on site for Agency inspection.

The recording system shows 1,120 more tonnes consigned than accepted during the reporting period. This is understood to be due mainly with the way waste received at the civic amenity facility is recorded. Not all wastes received at the civic facility are weighed in prior to processing however it is all weighed out and the offsite destinations recorded.

Table 5.1 Waste Received & Consigned 2011

EWC	Description	Waste In	Waste Out
02 07 04	Mixed Powders	24	24
13 05 03	Interceptor Sludge	566	560
15 01 01	Cardboard Packaging	1,168	1,411
15 01 02	Plastic Packaging	324	13
15 01 03	Wooden Packaging	1	
15 01 04	Metallic Packaging	35	31
15 01 05	Tetrapak	16	
15 01 06	Mixed Packaging	2,078	2,006
15 01 07	Glass Packaging	167	57
15 01 09	Textile Packaging	2	
16 01 06	Batteries		1
16 03 06	Silver Strips	77	
17 05 04	Soil & Stone from C&D Waste	307	416
17 09 04	Mixed C&D	330	654
19 08 02	Grit	12	
19 12 09	Minerals from mechanical treatment		186
19 12 12	Mixed Residual Waste from mechanical treatment		17,919
20 01 01	Paper & Cardboard	294	450
20 01 02	Glass Municipal	22	14
20 01 08	Biodegradeable Kitchen & Canteen Waste Wastes	226	286
20 01 11	Textiles	13	13
20 01 35*	WEEE	243	243
20 01 38	Wood from municipal sources	176	156
20 01 39	Plastic from municipal sources	8	242
20 01 40	Metal from municipal sources	141	183
20 02 01	Biodegradable garden & park waste	265	
20 03 01	Mixed Residual Waste from mechanical treatment	12,108	
20 03 07	Bulky Waste	5,259	117.38
	Total Accepted	23,862	
	Total Consigned		24,982

Table 5.2 Waste Received & Consigned 2010

EWC	Description	Waste In	Waste Out
02 07 04	Mixed Powders	68.00	67.78
02 07 05	Interceptor Sludge	730.00	743.00
15 01 01	Cardboard Packaging	935.00	1,224.82
15 01 02	Plastic Packaging	285.00	
15 01 03	Wooden Packaging	2.00	
15 01 04	Metallic Packaging	44.00	42.00
15 01 05	Tetrapak	15.00	
15 01 06	Mixed Packaging	1,225.00	1,127.87
15 01 07	Glass Packaging	122.00	92.32
15 01 09	Textile Packaging	1.00	
16 02 14	White Goods	0.50	
16 01 21*	Batteries		0.46
17 01 07	Mixture of concrete, bricks, tiles and ceramics from C&D Waste	188.00	378.23
17 04 01	Copper, bronze, brass	2.00	4.00
17 04 11	Cables from C&D Waste	2.00	
17 05 04	Soil & Stone from C&D Waste	19.00	13.25
19 08 02	Grit	14.00	
19 12 07	Processed Wood	1.00	14.09
19 12 09	Minerals from mechanical treatment	157.00	302.00
19 12 12	Mixed Residual Waste from mechanical treatment	5,060.00	12,755.21
20 01 01	Paper & Cardboard	375.00	428.00
20 01 03	Glass	2.00	
20 01 08	Commercial Food Wastes	142.00	68.11
20 01 11	Textiles	18.00	18.00
20 01 35*	WEEE	268.00	266.43
20 01 38	Wood from municipal sources	180.00	154.00
20 01 39	Plastic from municipal sources	10.00	287.55
20 01 40	Metal from municipal sources	130.00	243.26
20 02 01	Biodegradable garden & park waste	41.00	
20 03 01	Mixed Residual Waste from mechanical treatment	2,627.00	
20 03 07	Bulky Waste	4,696.00	263.23
	Total Accepted	17,359.50	
	Total Consigned		18,493.61
	Total Recovered		7,215.97
	Total Disposed		11,277.64
	Recycling Rate		39.02

Table 5.3 Total Tonnages Received and Consigned in 2003-2010

Year	Tonnes per Annum	Tonnes Recovered	Tonnes Landfilled
2003/2004	14,484	2,199	12,285
2004	18,548	6,351	12,197
2005	21,500	6,750	12,694
2006	23,196	8,393	15,634
2007	32,271	9,224	24,672
2008	36,993	7,082	32,148
2009	24,267	8,760	16,864
2010	17,359.50	7,215.97	11,277.64

6. ENVIRONMENTAL INCIDENTS AND COMPLAINTS

6.1 Incidents

There was one environmental incident during the reporting period which related to an exceedance of the dust deposition limit. There were no other incidents at the facility as defined by the licence in 2011.

The dust deposition limit was exceeded at D3 in June. It is however considered that the dust source was off site rather than an emission associated with site activities. The exceedance was reported to the Agency in accordance with Condition 3.3 of the Licence.

6.2 Register of Complaints

Greenstar maintains a register of complaints received in accordance with Condition 3.12 of the waste licence. No complaints were received in the reporting period.

7. ENVIRONMENTAL DEVELOPMENT

7.1 Environmental Management Programme Report

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

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

As part of this IMS Greenstar has developed a list of environmental, management, operating and maintenance procedures, details of which are outlined in Appendix 2. The schedule of Objectives and Targets, including their status for 2011 (Table 7.1), as well as the proposed Objectives and Targets for 2012 (Table 7.2) are presented below.

7.1.1 Site Management Structure

Name: David Stapleton

Responsibility: General Manager; overall management of the site

Experience: 19 years experience

Name: Barry Gallagher

Responsibility: Operations Manager; overall management of the site, responsible for management of all fleet activities

Experience: 21 years experience. N.C.B.S

Name: Anthony Lynch

Responsibility: Yard Foreman, management of baler, pickers, forklift driver and yard cleaner

Experience: 10 years

Name: Louise Lynch

Responsibility: Administration Manager, office administration

Experience: 9 years

7.1.2 Staff Training

Environmental Health and Safety training was carried out for all staff in 2010 and is due again in 2013.

7.2 Environmental Management Programme Proposal

7.2.1 Schedule of Objectives 2011

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

7.2.2 Schedule of Objectives 2012

A schedule of targets and objectives for 2012 has been set by the management of the Sligo facility. These objectives are outlined in Table 7.2.

Table 7.1 Schedule of Objective and Targets 2011

No	Objective	Target	Responsibility	Status
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.	Site Management	Ongoing
2	Energy & Resource Consumption	Summarise energy and resource usage on a quarterly basis with a view to reducing consumption	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.	Site Management	Ongoing
5	OHSAS Certification	The facility will be certified to OHSAS 18001 and will operate under an Integrated Environment, Health & Safety System	Site Management	Complete
6	Improve Waste Segregation	Review segregation organisation within the Material Recovery Building	Site Management	Complete

Table 7.2 Schedule of Objective and Targets 2012

No.	Objective	Target	Timescale	Responsibility
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.	Q1-Q4	Site Management
2	Energy & Resource Consumption	Summarise energy and resource usage on a quarterly basis with a view to reducing consumption	Q1-Q4	Site Management
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.	Q1-Q4	Site Management
4	Pollution Prevention	Strive to ensure that monitoring results comply with the licence limits and investigate any exceedances of emission limit values.	Q1-Q4	Site Management
5	Improve Waste Segregation	Review and improve the storage of wood waste externally.	Q2 2012	Site Management

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 071 - 9143037.

7.4 Report Financial Provision

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

8. OTHER REPORTS

8.1 European Pollutant Release and Transfer Register Regulation

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

APPENDIX 1

European Pollutant Release and Transfer Register



Environmental Protection Agency

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U.S. Environmental Protection Agency

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APPENDIX 2

Procedures List



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

Integrated Procedures - IP

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

Safety Procedures - SP

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



Doc. No.: Control	Revision No.: As Shown	Issue Date: As Shown
Approved By:	Malcolm Dowling – <i>Group Environmental Manager</i> Oliver Callan – <i>Group H&S Manager</i>	Page 2 of 4

Environmental Procedures - EP		
EP-01	Office Waste & Energy Management Procedure	Rev 01, 05/07/10
EP-02	Decommissioning and Aftercare Procedure	Rev 02, 14/09/11
EP-03	Environment Communications Procedure	Rev 02, 13/09/10
EP-04	Waste Permits & Licences Procedure	Rev 01, 05/07/10
EP-05	Waste Acceptance Procedure	Rev 01, 05/07/10
EP-06	Unacceptable Waste Procedure	Rev 01, 05/07/10
EP-07	Waste & Material Storage Procedure	Rev 01, 05/07/10
EP-08	Waste Processing Procedure	Rev 01, 05/07/10
EP-09	Site Infrastructure Procedure	Rev 01, 05/07/10
EP-10	Nuisance Management Procedure (Site Specific)	(Site Specific)
EP-11	Civic Amenity Site Procedure	Rev 01, 05/07/10



Doc. No.: Control	Revision No.: As Shown	Issue Date: As Shown
Approved By:	Malcolm Dowling – Group Environmental Manager Oliver Callan – Group H&S Manager	Page 3 of 4

Amendment History

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