

Ms. Helen Boyce,
Office of Environmental Enforcement,
West/North West Region,
Environmental Protection Agency,
John Moore Road,
Castlebar,
Co. Mayo

28th March 2012

RE: Annual Environmental Report - Greenstar Ltd - Sligo (Reg. No. W0058-01)

Dear Ms. Boyce,

Please find enclosed an original and 2 no. copies of the Annual Environmental Report For the above referenced facility for the year 2012.

If you have any queries, please call me.

Yours sincerely,



Michael Watson

1204810/MW/CW Encl
CC: Mr Malcolm Dowling, Greenstar Ltd.
Mr. Barry Gallagher, Greenstar Ltd.



ANNUAL ENVIRONMENTAL REPORT
FOR GREENSTAR LTD.
DEEP WATER QUAY SLIGO
LICENCE NO. W0058-01
JANUARY 2012 – DECEMBER 2012

Prepared For: -

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28th March 2013

Project		Annual Environmental Report 2012		
Client		Greenstar Ltd. W0058-01		
Report No	Date	Status	Prepared By	Reviewed By
0481005	15/02/2013	Draft	Michael Watson MA MCIWM	Mr Barry Sexton MSc
	12/03/2013	Draft A		
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1. INTRODUCTION

This is the 2012 Annual Environmental Report (AER) for the Greenstar Ltd. (Greenstar), Materials Recovery & Transfer facility (MRF) at Deep Water Quay, Sligo. It covers the period from the 1st January 2012 to the 31st December 2012.

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 Account is also taken of the AER Draft Guidance Document and AER Information Templates issued by the Agency in January 2013².

¹ EPA (Environmental Protection Agency) 1999 Waste Licensing – Draft Guidance on Environmental Management Systems and Reporting to the Agency

² EPA (Environmental Protection Agency) 2012 Draft AER Guidance Document

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 up 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 by both permitted 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 that are suitable for composting are sent to an offsite authorised 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 arrives in skips of varying sizes. The waste loads are inspected and then bulked. The majority of the incoming material is recovered and sent off-site either for re-use or recycling at authorised facilities. The non-recyclable elements 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 skips for MSW, dry recyclables (cardboard, plastics, metals, papers etc) and WEEE.

2.2.2 Plant List

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

Table 2.1 Plant List – 2012

No.	Plant	Model	Operational Capacity	Standby Capacity
1	Baler	Boa	7t/hr	7/t/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 monitoring results are submitted to the Agency at quarterly intervals. An overview of the monitoring conducted in 2012 is presented in this Section.

3.1 Surface Water Monitoring

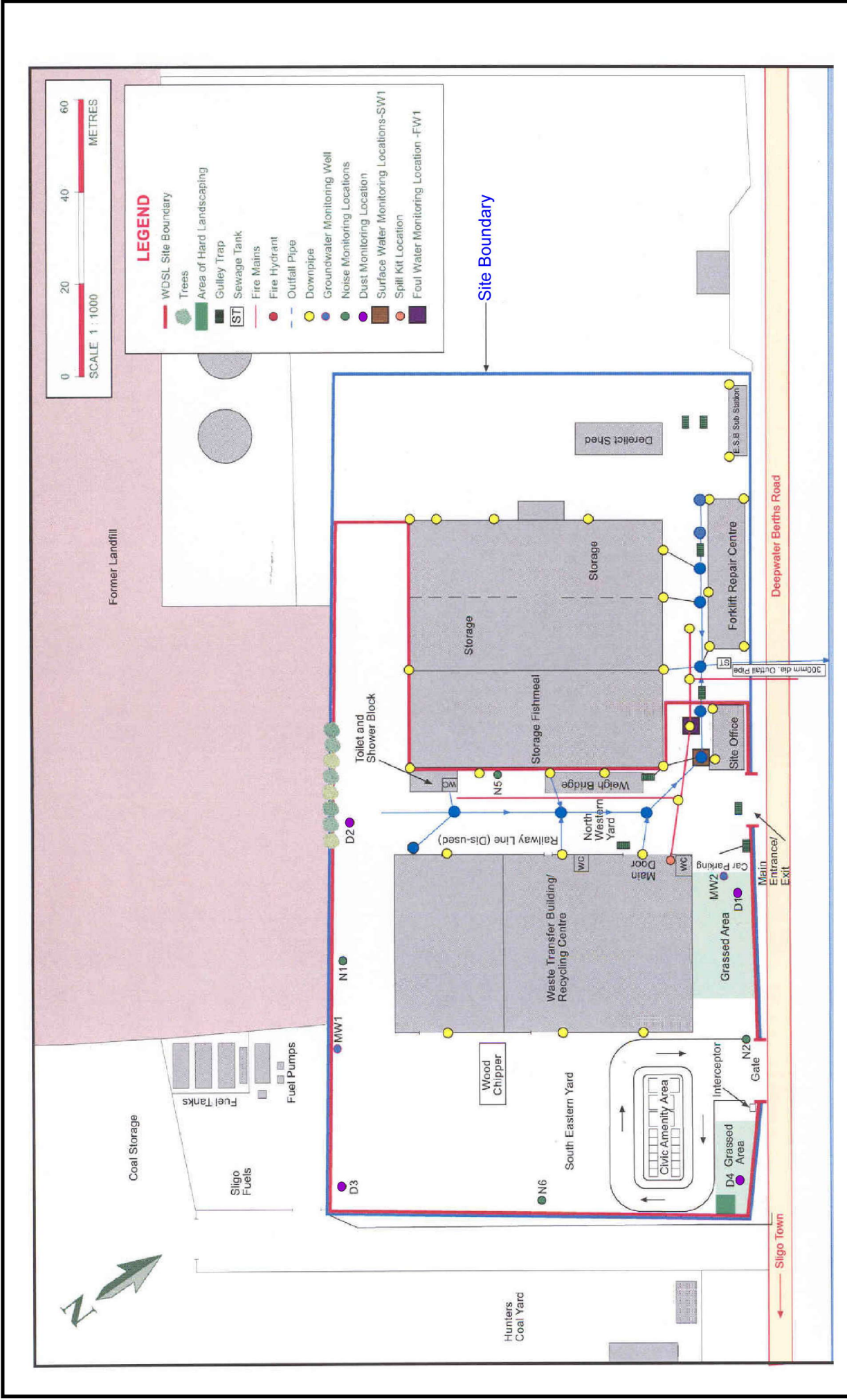
The surface water drainage system, serving roofed and open yard areas, discharges via a silt trap and petrol/oil interceptor to the Garavogue River. The interceptor and drains are cleaned as required.

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, and oils, fats and greases.

The results, which are shown on Table 3.1, indicate the discharge is generally of good quality. There was a marginal exceedance of the Total Suspended Solids and BOD emission limit values (ELV) in Q2 2012. The Agency, Sligo Borough Council and the Fisheries Board were notified of this exceedance.

Greenstar investigated the incident, but the cause could not be established. There were no incidents prior to sampling likely to have led to the elevated levels and the yard and storm water maintenance schedule was found to be effective. This was the first exceedances of the ELVs for BOD and TSS since Q4 2010 and the levels were not considered to be significant. The levels were below the ELVs in the following two quarters.

Given the low flow rate of the discharge and the assimilative capacity of the Garavogue it is considered that the elevated BOD and TSS had an imperceptible impact on the water quality in the Estuary.



<p>CLIENT</p> <p>O'Callaghan Moran & Associates Granary House, Rutland Street, Cork Ireland. Tel: (021) 4321521 Fax: (021) 4321522 email: info@callaghanmoran.com</p>	<p>FIGURE NUMBER</p> <p>3.1</p>	<p>Scale</p> <p>Not To Scale</p>	<p>Revision</p> <p>A</p>
<p>TITLE</p> <p>Monitoring Locations</p>	<p>Greenstar Ltd</p> <p>Details © Ordnance Survey Ireland. Government of Ireland.</p>		
<p><small>This drawing is the property of O'Callaghan Moran & Associates and shall not be used, reproduced or disclosed to anyone without the prior written permission of O'Callaghan Moran & Associates and shall be returned upon request.</small></p>			

Table 3.1 Surface Water Results for 2012

Parameter	Units	SE-2	SE-2	SE-2	SE-2	Emission Limit (Grab Sample)
		Q1	Q2	Q3	Q4	
pH	pH units	7.2	7.4	7.1	7.2	6 – 9
Conductivity	mS/cm	0.630	0.630	0.715	0.680	N/A
Chloride	mg/l	8	27	6.5	9	N/A
Ammoniacal Nitrogen	mg/l	0.04	1.71	0.101	0.272	N/A
COD	mg/l	97	135	34	83	N/A
BOD	mg/l	23	27	9	23	24
Total Suspended Solids	mg/l	27	65	29	31	36
Surfactants	mg/l	0.24	0.78	0.012	0.153	N/A
Mineral Oils	mg/l	0.5	1.98	0.0227	0.0167	N/A
Oils, Fats & Greases	mg/l	<2	<2	<2	<2	12

N/A - not applicable

*Condition 7.7.1.3. No grab sample shall exceed 1.2 times the emission limit value.

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 at 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 E5 of the Licence. The parameters were ammoniacal nitrogen, BOD, chloride, mineral oils, pH, faecal coliforms and total coliforms.

The methodologies were all ISO/CEN approved or equivalent. There are no trigger limits set in the Licence and the results are compared to the Interim Guideline Values (IGV) on groundwater quality published by the Agency and the Groundwater Threshold Values (GTV) set out in the European Communities Environmental Objectives (Groundwater) Regulations (S.I. 9 of 2010). The IGVs are not statutory, but were developed to assist in the assessment of impacts on groundwater quality. The IGVs are based on, but are more conservative than the Drinking Water quality standards. GTVs have only been established for core indicator parameters. The summary results for 2012 are shown on Table 3.2.

Elevated levels of ammoniacal nitrogen and mineral oils were detected in the upgradient well (MW-1).

Marginally elevated levels of chloride and ammoniacal nitrogen were detected in the downgradient well (MW-2) when compared to the IGV. The levels of chloride at MW-2 were lower than the GTV.

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 metres 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 January 2013

Parameter	Units	MW1	MW2	IGV	GTV
pH	pH units	6.9	6.7	6-9	-
Temperature	°C	9.5	9.5	-	-
Electrical Conductivity	mS/cm	0.750	0.880	1	1
Chloride	mg/l	19.5	32.4	30	24-187.5
Ammoniacal Nitrogen	mg/l	1.32	0.336	0.15	0.065-0.175
BOD	mg/l	<2	14	-	-
Mineral Oils	mg/l	118	<0.0002	10	-
Faecal Coliforms	cfu/100ml	<1	<1	0	-
Total Coliforms	cfu/100ml	<1	<1	0	-

3.3 Foul Water Monitoring

Foul water is generated by floor runoff in the transfer building and sanitary discharges. In July 2010, 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 and 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 and oils, fats and greases. 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. The foul water discharge complied with the ELVs in 2012.

Table 3.3 Foul Water Monitoring Results for 2012

Parameter	Units	SE-1 Q1 2012	SE-1 Q2 2012	SE-1 Q3 2012	SE-1 Q4 2012	Sanitary Authority Emission Limits
pH	pH Units	8.12	7.3	7.4	6.5	6 – 10
BOD	mg/l	2	7	4	27	3,000
COD	mg/l	12	26	15	23	6,000
Chloride	mg/l	18.7	26	16.9	19	-
Ammoniacal Nitrogen	mg/l	0.3	1.42	0.723	1.02	100
Total Suspended Solids	mg/l	45	14	<2	<2	1,250
Surfactants	mg/l	<0.2	0.021	0.006	0.150	100
Oils, Fats & Greases	mg/l	<0.01	<2	<2	<2	100
Mineral Oils	mg/l	<0.01	0.0568	0.141	0.01	10

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 23rd May 2012 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 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 as there were no impacts from facility activities at any potentially noise sensitive locations.

The nearest sensitive receptors to the facility are private residences located approximately 200 metres to the east of the facility across the Garavogue River at Cartron. There are also some individual residences located close to the Finiskiln Industrial Estate approximately 200 metres 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 established that noise emissions from the study site were not audible or discernible at these locations.

Table 3.4 Noise Monitoring Results 2012

Station	Time	L _{Aeq 30} min dB	L _{AF10 30} min dB	L _{AF90 30} min dB	Specific level* dB	Noise audible
N1	0856- 0926	58	61	50	53	Breaker breaking concrete at adjacent premises outside boundary, approx 60 m from N1, continuously dominant. Greenstar loader and forklift truck movements audible at low level within building. Plastic wrapping fluttering in breeze nearby continuously audible.
N2	1012- 1042	58	58	48	57	Noise emissions from user vehicles and waste disposal activities at civic amenity area dominant when present. Otherwise, emissions from sporadic truck movements within main site audible. From 10:20, loader and forklift truck emissions audible within building. Intermittent vehicle movements audible on industrial estate roadways outside boundary. Distant traffic continuously audible at low level. Bird song/calls.
N5	0823- 0853	63	65	51	63	Occasional truck and van movements through entrance, weighbridge and local yard dominant when present, particularly when idling on weighbridge. Loader, trucks and forklift truck in main building also audible. Starlings audible. Traffic movements audible at low level on industrial estate roadway.
N6	0930- 1000	63	66	56	55	Breaker breaking concrete at adjacent premises outside boundary, approx 60 m from N6, continuously dominant. Loader and forklift truck movements audible within building. Sporadic truck movements also audible within building.

*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 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/August and December. The results of the dust monitoring are presented in Table 3.5.

The dust deposition limit (350 mg/m²/day) was exceeded at two of the four monitoring locations (D1 and D3, 436 and 370 mg/m²/day respectively) in June 2012. The limits were not exceeded at locations D2 and D4 (160 and 199 mg/m²/day respectively). The limits were not exceeded at any location in either July or December 2012.

The sources of the dust found at each of the gauges is not exclusively the Greenstar facility, which is located in a busy port surrounded by a variety of industrial activities, including an open coal storage facility to the west and south west, a petrol and oil distribution centre to the south, a fish meal storage warehouse to the east and an unvegetated partially restored landfill to the south. The facility is also bounded to the north by the Port road leading to other industrial units further along the quay.

Location D1 is on the northern boundary of the facility, adjacent to the Port access road. D3 is at the south western boundary, close to the adjacent open yard coal storage facility. When collecting the gauges, OCM staff noted the presence of black dust indicating the presence of coal dust from the open stockpiles of coal in the coal yard. Given the low levels recorded at D2 and D4 it is not considered that the levels recorded at D1 and D3 are indicative of emissions from the Greenstar facility. It is considered that the elevated levels were due to offsite sources.

Table 3.5 Dust Monitoring Results 2012

	June '12 mg/m²/day	July/Aug '12 mg/m²/day	December '12 mg/m²/day	Deposition Limit mg/m²/day
D1	436	316	56	350
D2	160	88	6	350
D3	370	160	40	350
D4	199	192	28	350

3.6 Landfill Gas Monitoring

The annual gas monitoring 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 21st February 2012. 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. There are no trigger 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.

Table 3.6 Landfill Gas Monitoring Results 2012

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: 21/02/2012			
Instrument used: Gas Data LMSx		Normal Analytical Range: 0 – 100%					
Monitoring Personnel: OCM				Weather: Dry, Mild			
Results							
Sample ID	Borehole/spike/other	CH₄ (% v/v)	CO₂ (% v/v)	O₂ (% v/v)	Barometric Pressure (mb)	Comment	
MW1	Borehole	0.0	0.1	19.2	998		
MW2	Borehole	0.0	0.1	20.1	998		
OFFICE	-	0.0	0.1	20.5	998		

4. SITE DEVELOPMENT WORKS

4.1 Engineering Works

It had not been intended to carry out any development works in 2012 however a portion of the site at the north western boundary was resurfaced in March/April 2012. Prior to March/April this area had been used to store timber pending removal offsite for processing. Timber storage was moved to the north western yard which is concreted. The timber is currently stored in two (2No.) 40 yard roll on/roll off containers pending removal offsite for processing. The former storage area was cleaned, re-stoned and rolled and is now used for the storage of empty wheelie bins and other empty waste receptacles.

It is intended to concrete the permeable portion of the site currently used for the storage of empty wheelie bins at the north western boundary. For operational reasons, it is also intended to resurface portion of the MRF building floor. The MRF building was constructed in two phases and the southern area of the floor is at a slightly lower level to the northern area. It is intended to raise the floor at the southern area to remove the divide between both sides of the building.

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 2013. 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. An energy audit was not completed however the facility has simple energy uses (collection fleet vehicles and a small number of onsite plant items) and consumption is reviewed quarterly to ensure any wastage is identified and rectified quickly. The 2011 consumption figures are presented on Table 4.2 for comparative purposes. The volumes used have not altered significantly since 2011.

Table 4.1 Estimates of Resources Used On-Site 2012 & 2011

Resources	Quantities 2012	Quantities 2011
Vehicle Diesel	140,486 litres	142,189 litres
Diesel (green)	23,766 litres	25,648 litres
Electricity	123,466 kwh	112,276 kwh
Hydraulic & Engine Oil	1,400 litres	800 litres

5. WASTE RECEIVED AND CONSIGNED 2012

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

The total quantity of waste received was 18,234 tonnes and the total amount consigned was 19,201 tonnes. For comparative purposes the amounts of waste received and consigned from 2003 to 2011 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 authorised recovery and disposal facilities and a copy of the relevant Facility Permit or Waste Licences retained on site for Agency inspection.

The records show that more waste was consigned from the site than accepted. The difference was 967 tonnes. In accordance with Condition 3.10 of the licence some wastes received at the civic amenity facility were not weighed in prior to processing however it is all weighed out and the offsite destinations recorded.

Table 5.1 Waste Received & Consigned 2012

EWC	Description	Waste In	Waste Out
02 07 05	Interceptor Sludge	450	428
15 01 01	Cardboard Packaging	1360	1,729
15 01 02	Plastic Packaging	375	242
15 01 03	Wooden Packaging	0.68	
15 01 04	Metallic Packaging	36	21.05
15 01 05	Tetrapak	26	
15 01 07	Glass Packaging	118	55.3
15 01 09	Textile Packaging	1.52	
16 03 06	Silver Strips	221	75
17 05 04	Soil & Stone from C&D Waste	0.82	
17 09 04	Mixed C&D	212	569
19 08 02	Grit	11	
19 09 02	Sludges from water clarification		13.5
20 01 01	Paper & Cardboard	216	276
20 01 02	Glass Municipal	52	9.4
20 01 08	Biodegradeable Kitchen & Canteen Waste Wastes	357	209
20 01 11	Textiles	12	13.3
20 01 33	Batteries	2.55	0.7
20 01 35*	WEEE	249	245
20 01 38	Wood from municipal sources	212	68
20 01 39	Plastic from municipal sources	3	28
20 01 40	Metal from municipal sources	53.7	94
20 02 01	Biodegradable garden & park waste	42.65	
20 03 01	Mixed Residual Waste from mechanical treatment	8,095	7,660
20 03 07	Bulky Waste	6,132	7,463
	Total Accepted	18,234	
	Total Consigned		19,201
	Recovery		7,423
	Disposal		11,778
	Recovery Rate		38.5%

Table 5.2 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	Biodegradable 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 5.3 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	7,215	11,277
2011	24,982	8,961	16,021
2012	19,201	7,423	11,778

6. ENVIRONMENTAL INCIDENTS AND COMPLAINTS

6.1 Incidents

There were two minor environmental incidents during the reporting period which related to an exceedance of the dust deposition limit and surface water ELVs. There were no other incidents at the facility as defined by the Licence.

The dust deposition limit (350 mg/m²/day) was exceeded at two of the four monitoring locations (D1 and D3, 436 and 370 mg/m²/day respectively) in June 2012. The limits were not exceeded at locations D2 and D4 (160 and 199 mg/m²/day respectively). The limits were not exceeded at any location in either July/August or December 2012. It is 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.

There was a marginal exceedance of the Total Suspended Solids and BOD emission limit values (ELV) for the surface water discharge in Q2 2012. The Agency, Sligo Borough Council and the Fisheries Board were notified of this exceedance.

Greenstar investigated the incident, but the cause could not be established. There were no incidents prior to sampling likely to have led to the elevated levels and the yard and storm water maintenance schedule was found to be effective. This was the first exceedances of the ELVs for BOD and TSS since Q4 2010 and the levels were not considered to be significant. The levels were below the ELVs in the following two quarters.

6.2 Register of Complaints

Greenstar maintains a register of complaints received in accordance with Condition 3.12 of the 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 2012 (Table 7.1), as well as the proposed Objectives and Targets for 2013 (Table 7.2) are presented below.

7.1.1 Site Management Structure

Name: David Stapleton

Responsibility: General Manager; overall management of the site

Experience: 20 years experience

Name: Barry Gallagher

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

Experience: 22 years experience. N.C.B.S

Name: Anthony Lynch

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

Experience: 11 years

Name: Louise Lynch

Responsibility: Administration Manager, office administration

Experience: 10 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 2012

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

7.2.2 Schedule of Objectives 2013

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

Table 7.1 Schedule of Objective and Targets 2012

No.	Objective	Target	Timescale	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.	Q1-Q4	Ongoing
2	Energy & Resource Consumption	Summarise energy and resource usage on a quarterly basis with a view to reducing consumption	Q1-Q4	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.	Q1-Q4	Done. No complaints received in 2012, current procedures working adequately.
4	Pollution Prevention	Strive to ensure that monitoring results comply with the licence limits and investigate any exceedances of emission limit values.	Q1-Q4	On going. One minor incident related to dust notified to the Agency in June 2012
5	Improve Waste Segregation	Review and improve the storage of wood waste externally.	Q2 2012	Timber storage area moved from a permeable area of the site onto an impermeable yard in March/April 2012. Timber is currently stored in 2No. 40 yard roll on roll off containers in the north-eastern yard.

Table 7.2 Schedule of Objective and Targets 2013

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	Complete an Energy Audit in compliance with Condition 9.13 of the Technical Amendment	Q1-Q4	Site Management
3	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
4	Infrastructural Development	Investigate the costs and develop SEW proposals to concrete the empty wheelie bin storage area and also to raise the floor at the southern section of the MRF building to come into line with the newer floor at the northern portion of the building.	Q3-Q4	Site Management
5	Environmental Liabilities	Commission the completion of an ELRA in 2013	Q3	Site Management
6	Accident Prevention (Environmental Impacts)	Complete an Accident Prevention Procedure for the facility in compliance with Condition 10.8 of the Technical Amendment	Q3	Site Management
7	Maintain the current 'Compliant' status to the ISO 18001/14001	Review procedures to ensure compliance with the external ISO audit scheduled for July 2013	Q3	Site Management
8	Odour Management	Compile an Odour Management Plan for the facility and include it on the training matrix referred to in Objective 1	Q2 – Q3	Site Management

7.3 Communications Programme

Greenstar are committed to setting the standard in waste management and ensuring environmental compliance in all operations. To this end Greenstar has drawn up a Communications Programme, which details how members of the public are facilitated in accessing environmental information at the facility.

Records available for public inspection on-site include:-

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

Opening Times for Inspection of Records are from 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 ELRA & Report on Financial Provision

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

Condition 11.2 of the licence required the original licensee to submit an Environmental Liabilities Risk Assessment (ELRA) to the Agency for approval within six months of the grant of the licence (July 2001). It is proposed to complete a revised ELRA for the facility in 2013.

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

[Guidance to completing the PRTR workbook](#)

AER Returns Workbook

Version 1.1.15

REFERENCE YEAR	2012
-----------------------	------

1. FACILITY IDENTIFICATION

Parent Company Name	Greenstar Limited
Facility Name	Greenstar Limited
PRTR Identification Number	W0058
Licence Number	W0058-01

Waste or IPPC Classes of Activity

No.	class_name
3.11	Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.13	Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.
4.13	Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.
4.2	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).
4.3	Recycling or reclamation of metals and metal compounds.
4.4	Recycling or reclamation of other inorganic materials.
Address 1	Deepwater Quay
Address 2	Sligo
Address 3	
Address 4	
Country	Ireland
Coordinates of Location	-8.48919 54.28
River Basin District	IEWE
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	Malcolm Dowling
AER Returns Contact Email Address	malcolm.dowling@greenstar.ie
AER Returns Contact Position	Group Compliance Manager
AER Returns Contact Telephone Number	012947976
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	
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
5(c)	Installations for the disposal of non-hazardous waste
5(c)	Installations for the disposal of non-hazardous waste
50.1	General

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

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

4. WASTE IMPORTED/ACCEPTED ONTO SITE

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

Do you import/accept waste onto your site for on-site treatment (either recovery or disposal activities) ?	
--	--

This question is only applicable if you are an IPPC or Quarry site

4.1 RELEASES TO AIR

[Link to previous years emissions data](#)

| PRTR# : W0058 | Facility Name : Greenstar Limited | Filename : w0058_2012.xls | Return Year : 2012 |

28/03/2013 12:17

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

4.2 RELEASES TO WATERS

[Link to previous years emissions data](#)

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO WATERS	
POLLUTANT	
No. Annex II	Name

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

SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO WATERS	
POLLUTANT	
No. Annex II	Name

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

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

RELEASES TO WATERS	
POLLUTANT	
Pollutant No.	Name

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

4.3 RELEASES TO WASTEWATER OR SEWER

[Link to previous years emissions data](#)

| PRTR# : W0058 | Facility Name : Greenstar Limited | Filename : w0058_2012.xls | Return Year : 2012 |

28/03/2013 12:17

SECTION A : PRTR POLLUTANTS

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs				
POLLUTANT			METHOD		QUANTITY				
No. Annex II	Name	M/C/E	Method Used		Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	
06	Ammonia (NH3)	M	Method Code	Designation or Description					
			ALT		0.026	0.026	0.0	0.0	
					0.0	0.0	0.0	0.0	

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

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

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs				
POLLUTANT			METHOD		QUANTITY				
Pollutant No.	Name	M/C/E	Method Used		Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	
			Method Code	Designation or Description					
303	BOD	M	ALT		0.3	0.3	0.0	0.0	
306	COD	M	ALT		0.57	0.57	0.0	0.0	
308	Detergents (as MBAS)	M	ALT		0.001	0.001	0.0	0.0	
314	Fats, Oils and Greases	M	ALT		0.0003	0.0003	0.0	0.0	
324	Mineral oils	M	ALT		0.569	0.569	0.0	0.0	
240	Suspended Solids	M	ALT		0.885	0.885	0.0	0.0	

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

4.4 RELEASES TO LAND

[Link to previous years emissions data](#)

| PRTR# : W0058 | Facility Name : Greenstar Limited | Filename : w0058_2012.xls | Return Year : 2012 |

28/03/2013 12:17

SECTION A : PRTR POLLUTANTS

RELEASES TO LAND					Please enter all quantities in this section in KGs		
POLLUTANT		METHOD			QUANTITY		
No. Annex II	Name	M/C/E	Method Used		Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
			Method Code	Designation or Description			
					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					Please enter all quantities in this section in KGs		
POLLUTANT		METHOD			QUANTITY		
Pollutant No.	Name	M/C/E	Method Used		Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
			Method Code	Designation or Description			
					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# : W0058 | Facility Name : Greenstar Limited | Filename : w0058_2012.xls | Return Year : 2012 |

28/03/2013 12:17

Please enter all quantities on this sheet in Tonnes

0

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recoverer/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recoverer/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	02 07 05	No	427.84	sludges from on-site effluent treatment	R13	M	Weighed	Offsite in Ireland	Envirogrind Ltd,env/143/wp4	Donegal Road Pettigo ,Pettigo,Donegal ... Ireland		
Within the Country	19 09 02	No	13.478	sludges from water clarification	R13	M	Weighed	Offsite in Ireland	Envirogrind Ltd,env/143/wp4	Donegal Road Pettigo ,Pettigo,Donegal ... Ireland	Envirogrind Ltd,env/143/wp4,Donegal Road Pettigo ,Pettigo,Donegal ... Ireland	Donegal Road Pettigo ,Pettigo,Donegal ... Ireland
Within the Country	15 01 01	No	72.43	paper and cardboard packaging	R13	M	Weighed	Offsite in Ireland	Irish Packaging Recycling Ltd (Panda),W0263-01 MLM Ltd (ACM Europe UK),TFS Broker	Rd.,Walkinstown,Dublin 12,Ireland		
To Other Countries	15 01 01	No	543.51	paper and cardboard packaging	R13	M	Weighed	Offsite in Ireland	IRE/G021/11UNITED KINGDOM		
To Other Countries	15 01 01	No	66.83	paper and cardboard packaging	R13	M	Weighed	Abroad	International Recycling Ltd. IRE/G050/08, IRE/G050/08	Court... Norwich, NR2 4AP, United Kingdom		
To Other Countries	15 01 01	No	978.67	paper and cardboard packaging	R13	M	Weighed	Abroad	Cellmark USA, IRE/G180/11	200 Tarnal Plaza, California, 95245, United States		
Within the Country	15 01 01	No	68.38	paper and cardboard packaging	R13	M	Weighed	Offsite in Ireland	Mark Lydon Enterprises Ltd,IRE/G021/12,United Kingdom		
Within the Country	15 01 02	No	27.64	plastic packaging	R13	M	Weighed	Offsite in Ireland	WERS Ltd, WFP-G-09-0002-01	Est.,Tuam, Co. Galway, Ireland		
Within the Country	15 01 04	No	21.05	metallic packaging	R13	M	Weighed	Offsite in Ireland	Erin Recyclers,WP SO-03-10	Kinlough,Co. Leitrim,Ireland		
Within the Country	20 03 01	No	278.55	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	WERS Ltd, WFP-G-09-0002-01	Est.,Tuam, Co. Galway, Ireland		
Within the Country	20 03 01	No	515.98	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Barna Waste,W0106-02	Rd,Co Galway, Ireland		
Within the Country	15 01 07	No	55.36	glass packaging	R13	M	Weighed	Offsite in Ireland	Rehab Recycling Ltd, WPR 004	Ballymount Avenue ,Clondalkin,Dublin 22,Ireland		
Within the Country	17 09 04	No	568.98	09 02 and 17 09 03	R13	M	Weighed	Offsite in Ireland	Norris Plant Hire,WP SO-05-52	Cloverhill,Co Sligo,Ireland		
Within the Country	20 03 01	No	83.51	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Greenstar Limited,W0183-01	Millennium Business Park ,Ballycoolin, Dublin 11, Ireland		
Within the Country	20 03 07	No	893.67	bulky waste	D1	M	Weighed	Offsite in Ireland	Greenstar Ltd,W0146-02	Knockharley,Co Meath,Ireland		
Within the Country	20 03 01	No	920.06	mixed municipal waste	D1	M	Weighed	Offsite in Ireland	Bord Na Mona,W0201-03	Drehid Landfill,Co Kildare,Ireland		
Within the Country	20 01 01	No	276.0	paper and cardboard	R13	M	Weighed	Offsite in Ireland	Bailey Waste,WFP-FG-08-002-01	Rosemount Business park,,ballycoolin dublin 11,Ireland		
Within the Country	20 01 02	No	9.44	glass	R13	M	Weighed	Offsite in Ireland	Rehab Recycling Ltd, WPR 004	Ballymount Avenue ,Clondalkin,Dublin 22,Ireland		
Within the Country	20 01 08	No	209.02	biodegradable kitchen and canteen waste	R13	M	Weighed	Offsite in Ireland	Envirogrind Ltd,env/143/wp4	Donegal Road Pettigo ,Pettigo,Donegal ... Ireland		
Within the Country	20 01 11	No	13.3	textiles	R13	M	Weighed	Offsite in Ireland	Textile Recycling Ltd,WPR014	Greenogue,Dublin 24,Ireland		
Within the Country	20 01 35	Yes	243.93	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components	R13	M	Weighed	Offsite in Ireland	KMK Metals,W0113-03	Tullamore,Co Offaly,Ireland	KMK Metals,W0113-03,Tullamore,Co Offaly,Ireland	Tullamore,Co Offaly,Ireland

Within the Country	20 01 38	No	68.39	wood other than that mentioned in 20 01 37	R13	M	Weighed	Offsite in Ireland	Arigna Fuels Ltd. ,WMP 14/06	Arigna ... Carrick-On-Shannon ,Co. Roscommon ... Ireland
To Other Countries	15 01 02	No	122.09	plastic packaging	R13	M	Weighed	Abroad	Peak Environmental,WDL 14 Erin Recyclers ,WP SO-03-10,United Kingdom Kinlough ...Co. Leitrim...Ireland Millennium Business Park
Within the Country	20 01 40	No	93.91	metals	R13	M	Weighed	Offsite in Ireland	Greenstar Limited ,W0183-01	...Ballycoolin, Dublin 11, Ireland East Galway Landfill
Within the Country	20 03 07	No	1714.01	bulky waste	R13	M	Weighed	Offsite in Ireland	Greenstar Holdings Limited, W0178-02	...Ballinasloe, Co. Galway .. Ireland Drehid Landfill,Co
Within the Country	20 03 07	No	4833.9	bulky waste	D5	M	Weighed	Offsite in Ireland	Bord Na Mona,W0201-03 Ballynacarrick Landfill,W0024-4	Kildare,...,Ireland Ballynacarrick Landfill,...,Donegal,...,Ireland
Within the Country	20 03 01	No	3109.64	mixed municipal waste batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these	D5	M	Weighed	Offsite in Ireland	KMK Metals,W0113-03	Tullamore,...,Co Offaly,Ireland
Within the Country	20 01 33	Yes	0.45	batteries batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these	R13	M	Weighed	Offsite in Ireland	KMK Metals,W0113-03	Tullamore,...,Co Offaly,Ireland
Within the Country	20 01 33	Yes	0.28	batteries	R13	M	Weighed	Offsite in Ireland	Returnbat Ltd,w0105-01	Old Mill Ind Estate,...,Kill,Co Kildare,Ireland Tullamore,...,Co
Within the Country	16 06 01	Yes	0.107	lead batteries	R13	M	Weighed	Offsite in Ireland	KMK Metals,W0113-03	Offaly,Ireland Haggartstown,...,Dundalk,Co
Within the Country	20 01 39	No	28.115	plastics	R13	M	Weighed	Offsite in Ireland	Leinster Environmental,WP 2008/06	Louth,Ireland Haggartstown,...,Dundalk,Co
Within the Country	15 01 02	No	92.89	plastic packaging	R13	M	Weighed	Offsite in Ireland	Leinster Environmental,WP 2008/06	Louth,Ireland Weir Road Industrial
Within the Country	20 03 01	No	752.92	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	WERS Ltd. ,WFP-G-09-0002-01	Estate,...,Tuam , Co. Galway .. Ireland East Galway Landfill
Within the Country	20 03 01	No	2000.0	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Limited, W0178-02	...Ballinasloe, Co. Galway .. Ireland Oldbury
To Other Countries	16 03 06	No	75.16	organic wastes other than those mentioned in 16 03 05	R13	M	Weighed	Abroad	JBR Recovery Ltd,EPR/BJ98781Q	Road,Westbromich,Westmidlands,B70 9BS,UNITED KINGDOM

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

[Link to previous years waste data](#)

[Link to previous years waste summary data & percentage change](#)

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 03, 28/05/12
IP-12	Management Review Procedure	Rev 01, 05/07/10
IP-13	Control of Contractors/Visitors Procedure	Rev 03, 08/06/12
IP-14	Health & Safety & Environmental Monitoring	Rev 02, 29/10/10
IP-15	Emergency Preparedness & Response Procedure	Rev 02, 01/02/11

Safety Procedures - SP

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

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

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	Page 3 of 4
	Oliver Callan – Group H&S Manager	

Amendment History

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

Doc. No.: Control	Revision No.: 02	Issue Date: 1st February .
Approved By:	Malcolm Dowling – <i>Group Environmental Manager</i>	Page 4 of 4
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