

Office of Environmental Enforcement,
South East Region,
Environmental Protection Agency,
P.O. Box 3000,
Johnstown Castle Estate,
Co. Wexford

31st March 2010

RE: 2009 Annual Environmental Report – Greenstar Ltd. – Fassaroe Depot –
Reg. No. W0053-03

Dear Sir,

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

If you have any queries, please call me.

Yours sincerely,



Michael Watson

0904804/MW/MG

Enc.

c.c. Ms Suzanne Byrne, Greenstar Ltd.,
Ms. Sara Smyth, Greenstar Ltd. - Fassaroe Depot



ANNUAL ENVIRONMENTAL REPORT
GREENSTAR LTD.
INTEGRATED WASTE MANAGEMENT FACILITY
FASSAROE, BRAY,
COUNTY WICKLOW
LICENCE NO. W0053-03
JANUARY – DECEMBER 2009

Prepared For: -

Greenstar Ltd.,
Fassaroe,
Bray,
Co. Wicklow

Prepared By: -

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31st March 2010

Project		Annual Environmental Report 2009		
Client		Greenstar Ltd. W0053-03		
Report No	Date	Status	Prepared By	Reviewed By
0480405	30/03/2010	Draft	Martina Gleeson PhD	Michael Watson MA.
0480405 Rev A	31/03/2010	Draft 2	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), Integrated Waste Management Facility at Fassaroe, Bray, County Wicklow (W0053-03) and covers the reporting period January 2009 to December 2009. The AER has been prepared in compliance with Condition 11.11 of the Licence.

The content of the AER is based on Schedule G of the 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¹ EPA (Environmental Protection Agency) 1999 Waste Licensing – Draft Guidance on Environmental Management Systems and Reporting to the Agency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 Waste Management Activities

The depot is an integrated waste management facility. The Licence allows the following activities:

- bulking of municipal solid waste prior to transfer off-site for disposal;
- in-vessel composting of biodegradable waste;
- wood shredding;
- processing/storage of dry recyclables;
- recovery of construction and demolition waste;
- acceptance of waste at a civic waste facility, which includes hazardous waste such as bonded asbestos waste, WEEE and chlorofluorocarbons.

With the exception of composting, which has not yet started, all of the other activities are on-going. In December 2009, the agency technically amended the licence to allow for a limited change to the hours of operation so that Greenstar can carry out indoor processing of dry mixed recyclable material on a 24-hour day, 7-day week basis in the Phase 1 processing building.

2.1.1 Waste Type & Processes

The facility is licensed to accept a maximum of 200,000 tonnes of waste annually. This comprises the following waste types and volumes, as specified in Schedule A of the Licence: -

- Household and Commercial (143,560 tonnes),
- Construction & Demolition (54,040 tonnes),
- Hazardous (2,400 tonnes).

The following processes are carried out:

Mixed Municipal Solid Waste (MSW)

All mixed MSW containing a putrescible fraction is handled inside the original Transfer Building. The incoming waste is deposited on the floor of the building and is then either pushed into an open trailer or compacted for removal and disposal at an approved off-site residual landfill facility.

Dry Mixed Recyclables (DMR)

DMR is deposited onto the floor of the Phase 1 Transfer Building. Mixed DMR is separated, using a sorting line, into paper, cardboard, aluminium, steel, plastic bottles and plastic film fractions, which are then baled separately and stored pending removal for recycling. Source segregated DMR is baled directly and stored pending consignment.

Non Putrescible Commercial and Industrial (C&I)

Non putrescible C&I waste delivered by waste contractors is off-loaded in the Phase 2 building. Non putrescible C&I from the site's civic waste facility (public and commercial enterprises) is transferred to the Phase 2 building.

The processing is carried out indoors. The materials are pre sorted to remove bulky items and the remaining waste is fed into the C&I/C&D processing line. A 3D trommel is used to remove oversize items and the material then passes through a star-screener unit to remove the fine fraction containing subsoil and topsoil. Over-band magnets are used to separate ferrous metals from the waste. Material is passed through a picking station to remove metals, concrete/stone, timber, hard plastics and residual material.

The fines are sent to landfill for use as cover material. The concrete/stone is sent to the on-site crusher for further processing. Timber is sent to the on-site timber shredder. Metals are stored pending consignment from the site to an approved facility.

Construction and Demolition (C&D) Waste

The material is processed inside the Phase 2 building using the same processing line as for the C&I wastes described above. The fines are sent to landfill for use as cover material. The concrete/stone is sent to the on-site crusher to produce an inert aggregate (some of which is used for onsite restoration). Timber is sent to the on-site timber shredder. Metals are stored pending consignment from the site.

Wood, Timber and Green Waste

The wood and timber recovered on-site is shredded externally in the north of the site and sent off-site for disposal or recovery. Untreated timber accepted at the site is classed as A-grade timber and segregated from treated & recovered timber.

Green waste is stored pending transfer to an off-site composting facility. Although the Licence allows for in-vessel composting of biodegradable waste, this has not yet started.

Civic Amenity Area

The civic amenity area is located to the Northwest of the original Transfer Building. There are two closed 14 yard skips for MSW and separate bays for timber, green waste, metals and mixed wastes.

Hazardous Wastes

The Licence allows the acceptance of small volumes of hazardous waste at the civic amenity area (WEEE, bonded asbestos materials and chlorofluorocarbons). These wastes are stored in the waste quarantine area in suitable receptacles pending removal off site to approved facilities.

2.1.2 Plant List

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

Table 2.1 Existing Plant

No.	Plant	Model	Processing Capacity
1	Fuchs Grab F4	MHL340	30t/hr
1	Liebherr Grab/Excavator	R914	60t/hr
1	Hitachi Grab/Excavator	ZX200	60t/hr
1	Volvo Loading Shovel	L70E	20t/hr
2	Liebherr Loading Shovel	564	85t/hr
1	O&K Loading Shovel	L15.5	20t/hr
1	Mitsubishi Forklift	2.5t	15hr/wk
1	Mitsubishi Forklift	3.0t	65hr/wk
1	JCB Teletruk	3.5t	65hr/wk
1	Forklift Road Sweeper	MS 750 C	15hr/wk
1	DMR Process line	Turmec	8t/hr
1	DMR Baler	Bollegraaf HBC 60	70t/day
1	Generator	FG Wilson	78hr/week
1	C&I/C&D Process Line	Waltec	35t/hr
1	Erin Stone Screener	Fingerscreen	400t/day
1	Hammel Timber Pre Shredder	VB 750 D	30t/hr
1	Beast Timber shredder	3680	40t/hr
1	Tractor	Massey Ferguson 4255	2hr/wk
1	Extec stone crusher	Mega Bite	80t/hr
1	MSW compactor		80t/day
1	Weighbridge 2 Scales	RiteWeigh Aran Series 18 m	62hr/wk

3. EMISSION MONITORING

Greenstar implements a comprehensive environmental monitoring programme to assess the significance of emissions from site activities. The programme includes groundwater, surface water, leachate, sewer emissions, landfill gas, biological, noise and dust monitoring. The monitoring locations are shown on Figure 3.1. The monitoring results are submitted to the Agency at quarterly intervals. An overview of the monitoring conducted in the reporting period is presented in this Section, with summary data tables in Appendix 1.

3.1 Groundwater

There were four (4) on-site groundwater monitoring wells (BH-2, BH-5, BH-6 and BH-7) in 2009. Monitoring wells BH-2, BH-5 and BH-7 are positioned downgradient of the former landfill area while BH-6 is upgradient. The upgradient monitoring well (BH-6) was installed in March 2009 to replace the previous well which was removed during construction of the administration building. This location was dry throughout 2009.

3.1.1 *Groundwater Levels*

Groundwater levels were recorded at quarterly intervals in each of the wells. Based on the level data the direction of groundwater flow is north easterly.

3.1.2 *Groundwater Quality*

Groundwater quality was monitored at quarterly intervals. The sampling and analysis was carried out in accordance with recognised quality assurance and control procedures. The range of quarterly and annual analysis was as specified in Schedule C of the Waste Licence and includes pH, electrical conductivity, organic, inorganic and microbiological parameters. The summary of the results is included in Appendix 1.

The water quality in the three wells was generally consistent with that established in the previous monitoring and is generally reflective of the sites historic use as a landfill. The facility operated as both a quarry and landfill between 1947 and 2000. In 2006 Greenstar submitted proposed groundwater trigger levels to the Agency for its approval. Since 2006 the proposed trigger levels for conductivity and chloride in BH-2 and BH-5 have occasionally been exceeded.

3.1.3 Estimated Annual and Cumulative Quantity of Emissions to Groundwater

There are no direct emissions to groundwater. Indirect emissions include incident rainfall and storm water run-off from some of the paved areas. There were no changes to the site layout and operation during the reporting period that resulted in new or additional sources of direct or indirect discharges to groundwater.

All surface water from the paved areas and buildings is diverted away from the filled areas thereby reducing the potential indirect impact of surface water on groundwater quality. Section 3.2 discusses the quantities of emissions to surface water.

3.2 Surface Water

The surface water drainage system in and around the site is dominated by the proximity of the Glenmunder Stream along the north eastern boundary. The Glenmunder ultimately drains to the River Dargle, which is a designated salmonoid river. Surface water run-off from the roof of the new administration building and new car park area discharges to the Glenmunder via silt trap/oil interceptor.

Surface water quality is monitored at four locations (SW-1, SW-2, SW-3 and SW-4) on the Glenmunder and at one discharge point from the facility to the Glenmunder (SW-5). SW-1 is upstream of the site, SW-2 and SW-3 are along the site boundary and SW-4 is downstream of the site. SW-5 is the discharge point for rainfall runoff from the roof of the administration building and the car park area to the Glenmunder.

The monitoring was conducted at quarterly intervals and included in-situ and laboratory testing. The range of analysis was as specified in Schedule C of the Waste Licence and includes dissolved oxygen, pH, electrical conductivity, and organic and inorganic parameters. The sampling and analysis was carried out in accordance with recognised quality assurance and control procedures. A summary of the monitoring results are included in Appendix 1.

The monitoring confirmed that the quality of the surface water was generally good and that the facility was not impacting on the stream.

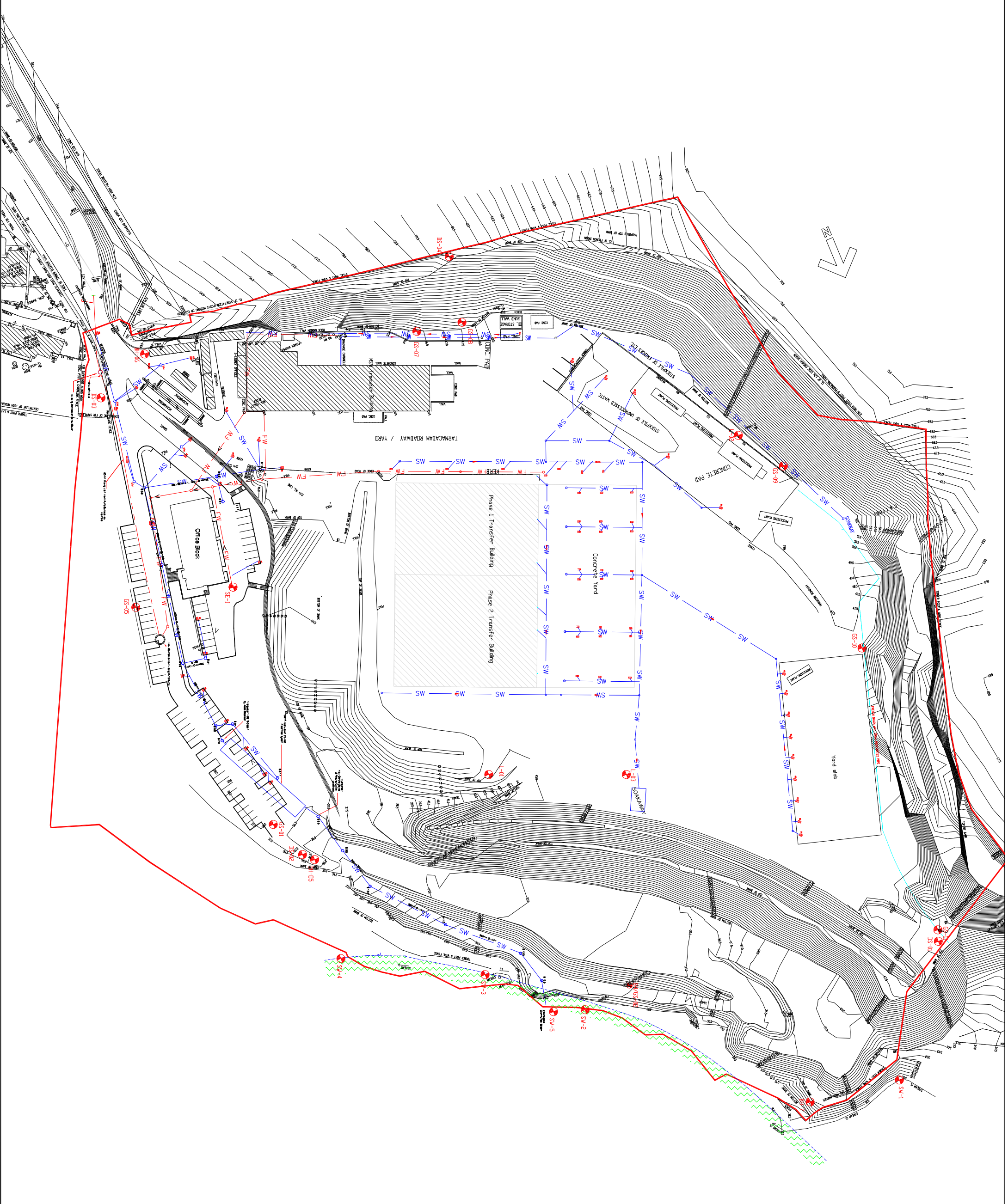
The results of a biological assessment of the Glenmunder was submitted to the Agency on the 17th November 2009. The assessment showed an improvement in the surface water quality of the stream since the previous monitoring in 2007 and is now categorised as 'Unpolluted'.

3.3 Wastewater

Wastewater from the facility (floor wash downs, vehicle washing) discharges to the municipal foul sewer. A wastewater sample was collected monthly from monitoring location SE-1. It was not possible to collect samples in January, March, July and August 2009, as there was no flow at the monitoring location. The range of analysis was as specified in Schedule C of the licence and included pH, COD, BOD, suspended solids, sulphates, oils, fats and greases, mineral oils and detergents. The monitoring results are included in Appendix 1. All of the parameters were significantly below the Emission Limit Values (ELVs) set in the Licence.

A flow meter was installed at the wastewater monitoring location SE-1 in September 2009 and was calibrated for use on the 1st October 2009. The facility discharged approximately 18m³ per day however the limit in the licence is 4m³ per day. It is considered possible that the 4m³/day limit set in the licence is a typographical error and in fact should read 24m³/day. This would be consistent with the volume estimates provided with the application to the review waste licence W0053-02 and the hourly rate specified in the existing licence.

Greenstar has requested the Agency to confirm if the limit is an error. If the limit is confirmed as being 24m³/day Greenstar will request the Office of Climate, Licensing & Resource Use to technically amend the Licence to reflect the authorised discharge rate.



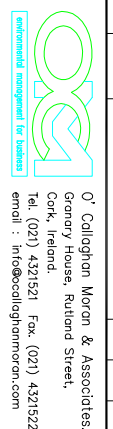
NOTES

LEGEND: MONITORING LOCATIONS

- Domestic Monitoring Location (pH, OAS and LEACHATE)
- (SURFACE WATER, SEWER and DUST)

#	I.D.	EASTING	NORTHING
1	SE-1	324369.01	218051.50
2	BH/OS-01	324311.85	218157.81
3	BH/OS-02	324212.87	218255.62
4	BH-6	324212.87	218255.62
5	BH-7	324330.71	217905.07
6	GS-05	324331.23	218071.80
7	GS-07	324146.36	218021.76
8	GS-08	324118.57	218049.52
9	GS-09	324094.55	218100.07
10	GS-11	324100.93	218272.43
11	L-01	324231.96	218165.23
12	L-02	324108.57	218071.82
13	L-03	324552.44	218035.59
14	SW-1	324132.36	218322.94
15	SW-2	324247.97	218240.29
16	SW-3	324326.38	218166.72
17	SW-4	324359.53	218124.20
18	SW-5	324289.90	218185.10
19	N1	324310.04	217965.54
20	N2	324313.86	218013.03
21	N3	324325.62	218143.04
22	N4	324209.97	218282.19
23	NSL1	324305.76	217958.30
24	NSL2	324299.20	217945.31
25	OS-01	324122.92	218288.56
26	OS-02	324285.71	218205.11
27	OS-03	324315.24	218005.08
28	OS-04	324161.16	218013.86

REV	DATE	DESCRIPTION	DRN	CHKD	APP
A	05.06.2008	LAYOUT	MW	JOC	JOC



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CLIENT
GREENSTAR

TITLE
 SITE LAYOUT
 FASSAROE
 Monitoring Locations

SCALE	FIGURE No.	REV.
1:250	3.1	A
A3		

3.4 Leachate

Leachate is generated by rainfall in the former landfill area. There are three leachate monitoring wells the locations of which are shown on the drawing in Figure 3.1.

3.4.1 Leachate Levels

Levels were monitored at monthly intervals during the reporting period. L-01 was not accessible in the fourth quarter 2009. It was not possible to record levels at L-02 in January 2009, as the location was inaccessible. In general the wells were either dry or contained small volumes of liquid at the base.

3.4.2 Leachate Quality

The Licence requires routine monitoring. However, over the reporting period the wells were either dry or there was an insufficient volume to collect representative samples.

3.5 Landfill Gas

Monitoring was carried out in accordance with Schedule C of the Waste Licence. The monitoring locations specified in the Licence include seven landfill gas wells (GS-05, GS-07, GS-08, GS-09, GS-10 and GS-11), the groundwater monitoring wells (BH-2, BH-5, BH-6 and BH-7) and the leachate boreholes (L-01, L-02 and L-03).

GS-01, GS-05, BH-2, BH-5, BH-6 and BH-7 are located outside the fill area. GS-07, GS-08, GS-09, GS-10, GS-11, L-01, L-02 and L-03 are located in the fill area. The nearest buildings to the filled area are the waste processing buildings and the site offices. OCM conducted gas monitoring in the waste processing buildings and the site offices during all monitoring events and the results are included in Appendix 1. The monitoring did not detect the presence of carbon dioxide or methane in any of the buildings.

Out of one hundred and sixty five landfill gas measurements made during the reporting period, methane was detected on nineteen (19) occasions in wells located in the fill area. Methane was not detected above the trigger level in any of the wells outside the waste body. Carbon Dioxide was measured at levels above the trigger level (1.5% v/v) on twenty-two (22) occasions on wells outside the waste body. The monitoring results do not indicate that landfill gas is migrating from the former fill area.

3.5.1 Landfill Gas Volumes

The elevated carbon dioxide concentrations and the occasional presence of methane indicate that some degree of degradation of organic waste is occurring within the fill

area. Based on the available information on the site history it appears that some biodegradable material may historically have been deposited at the site. The monitoring results do not indicate that landfill gas is migrating from the former fill area.

Given that the type and quantity of the biodegradable waste deposited on-site is not known, it is impossible to predict the volumes of landfill gas that may be generated. However, the monitoring results indicate that the volume of such degradable material is likely to be small and will reduce over time.

3.5.2 Landfill Gas Control

There is no landfill gas control system on-site. The landfill gas concentrations measured in the routine monitoring programme indicate there is no need for such control measures. However, this will be kept under review based on the results of the on-going landfill gas monitoring programme.

3.6 Noise Survey

Quarterly monitoring was carried out at the four on-site noise monitoring locations, N-1, N-2, N-3 and N-4 specified in the licence and two off-site noise sensitive locations NSL1 and NSL2. The surveys were conducted when the site was fully operational and a summary of the results are included in Appendix 1.

The facility was found to be in compliance with the licence conditions. Although recorded noise levels were on occasions above the 55 dB(A) limit set in the licence, noise emissions from the facility were not audible above this limit. Offsite noise sources particularly traffic contributed significantly to the local noise environment.

3.7 Dust Monitoring

Dust monitoring is carried out monthly at four monitoring locations, DS-01, DS-02, DS-03 and DS-04. DS-01 is located at the northern portion of the facility within the site boundaries and approximately 250 m from the nearest sensitive receptor. DS-02 is located away from operational areas, close to a formerly vegetated area along the northern boundary. This location is at the edge of the car park for the new office building. DS-03 is located within the site boundary close to the car park and to the east of the site weighbridges. DS-04 is located on the southern boundary of the facility at the top of an embankment. The dust deposition limit was not exceeded at any monitoring location during the reporting period.

4. SITE DEVELOPMENT WORKS

4.1 Specified Engineering Works

No Specified Engineering Works were carried out in 2009. It is not proposed to carry out any site engineering works in 2010. Minor upgrade works will be carried out on the empty skip storage area and it is intended to upgrade the civic amenity area in 2010 area although design plans have not been completed at this stage.

4.2 Site Restoration

No site restoration works were carried out in 2009.

4.3 Site Development

In 2010 is it intended to carry out the following development works:

- To relay the surface of the empty skip storage area using inert aggregate produced from the C&D process.
- Upgrade to the Waste Quarantine Area and Civic Amenity Area.
- It is intended to submit a planning application to Wicklow County Council in Q1 2010 for a limited change to the hours of operation so that the facility can carry out indoor processing of dry mixed recyclable material on a 24-hour day, 7-day week basis in the Phase 1 building, in line with the Technical Amendment B of Waste Licence W0053-03 granted by the Agency in 2009.

4.4 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	236,000 litres
Hydraulic, Transmission and Engine Oil	6,000 litres
Gear Oil	2,400 litres
Odour Neutraliser	1,525 kg
Truck Wash Detergent	3,000 kg
Electricity	471,000 kWh
Gas	124,795 kWh

5. WASTE RECEIVED AND CONSIGNED FROM THE FACILITY

Table 5.1 shows the total quantities of waste received at and consigned from the facility in the reporting period. 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 135,386.12 tonnes. The total waste consigned was 122,331.95 tonnes. The difference between the accepted waste and consigned waste consists of waste remaining on site at the end of 2009 (13,054.17 tonnes) which was consigned in 2010.

For comparative purposes Table 5.2 shows the total quantities of waste received at and consigned from the facility in 2008. Table 5.3 shows the quantities of waste received and consigned in previous years.

All the consigned wastes went to recovery and disposal facilities agreed with the Agency. The recycling rate for the facility is estimated at 50%.

Table 5.1 Waste Received and Consigned 2009

EWC	Description	Waste In	Waste Out
10 02 11*	Oil Filters		0.16
13 02 08*	Waste Oil		1.10
15 01 01	Cardboard Packaging	3,095.40	422.62
	OCC Baled		237.18
			3,128.66
			2,413.86
			217.84
			499.86
	Soft Mixed Baled		3,516.56
		505.50	
15 01 02	Clear Plastic Baled		20.68
			255.26
	Coloured Plastic Baled		132.30
	Plastic Drum Lid	2.92	
	Plastic Bottles		790.30
			514.86
			181.54
	Plastic Bottles Baled		78.90
	Plastic Film		53.32
	Plastic Film Clear		60.66
			98.20
Plastic Film Colour		192.98	
Plastic Packaging	375.82	51.08	
Polystyrene	45.35		
15 01 03	Pallets	86.38	
	Wood	325.45	
	Wooden Packaging	2,050.58	
15 01 04	Aluminium	6.60	
	Aluminium Cans	33.31	36.16
	Metallic Packaging	24.24	
	Steel Cans		33.86
15 01 05	Tetra Pak Cartons	2.80	
15 01 06	Mixed Packaging	21,269.32	69.92
15 01 07	Glass Packaging	605.02	1,459.60
16 02 14	Rec Electronics & Electrics	3.94	
16 03 04	Polyurethane Foam	0.56	
16 05 04*	Gas Cylinders		3.10
17 01 07	C&D Inert Mixed	6,387.66	17.76
			25.42
	Building Materials		291.06
17 04 01	Copper		
17 04 11	Cable	5.82	
17 05 04	C&D Inert Mixed	1,607.75	
	Soil & Stones	13.67	
17 06 05*	Asbestos		6.02
17 08 02	Plasterboard	4.02	77.62
17 09 04	C&D Inert Mixed	333.33	
19 05 01	Non composted Fractions	21.94	

EWC	Description	Waste In	Waste Out	
19 12 03	Metal		8.34	
19 12 07	Wood	1.02	1,341.97	
			134.78	
			15,165.15	
			297.28	
19 12 09	Fines C&I		4,469.34	
			8,079.17	
	Building Materials		804.46	
			2,740.34	
19 12 12	C&I Dry Mixed	6,765.38	12.18	
	MSW Municipal Mixed	19,372.41	20,275.08	
	LDF Activated Carbon	25.46	40,733.43	
20 01 01	Cardboard & Paper	108.09	25.46	
	Cardboard Packaging	20.70		
	Newsprint	74.00		
	Recy Paper	556.61		
	Election Posters	1.44		
	News & Pams Baled		74.10	
	Mixed Paper Baled			252.64
				2,649.46
			534.58	
20 01 02	Glass	707.34	6,095.22	
20 01 08	Kitchen and Canteen Waste	407.05		
20 01 21*	Fluorescent Tubes		0.04	
20 01 23*	Fridge Freezer CFC		3.20	
20 01 27*	Domestic Waste		5.64	
20 01 35*	Monitor TVs		24.21	
20 01 36	Electronics & Electrics	1.72		
20 01 38	Wood	4,017.25	41.56	
	Woodchip	1,133.14	82.82	
20 01 39	Plastic	0.63	63.51	
	Metallised CDs	0.68		
20 01 40	Copper Wire		5.81	
	Metal	538.45	2,492.30	
	Aluminium	0.19		
20 02 01	Green Biodegradable Waste	7,591.40	43.22	
	Green Mixed	64.33		
20 03 01	MSW Municipal Mixed	21,334.83		
	Unbaled MSW	1,269.13		
20 03 07	C&I Dry Mixed	35,092.99		
	Total Received	135,386.12		
	Total Consigned		122,331.95	
	Total Recovered		61,297.98	
	Total Disposed		61,039.99	
	Recovery Rate		50.10%	

Table 5.2 Waste Received & Consigned 2008

EWC	Description	Waste In	Waste Out	
15 01 01	Cardboard Packaging	2,065.21	157.06	
			157.02	
			741.34	
	Multi Product Load	39.32		
	OCC Baled			188.34
				828.04
				137.94
				315.50
165.40				
Soft Mixed Baled		413.30		
15 01 02	Plastic Film (Colour)		390.72	
	Plastic Film (Clear)		529.94	
	Plastic Bottles	47.88	80.58	
			566.72	
			254.18	
	Plastic Packaging	201.08		
	Polystyrene	18.59		
FIBC Bags PP		13.24		
15 01 03	Pallets	153.48		
	Wooden Packaging	3,921.13		
15 01 04	Aluminium	103.24		
	Aluminium Cans	23.34	52.61	
	Metallic Packaging	11.51	80.95	
	Steel Cans	2.04	190.64	
15 01 05	Tetra Pak Cartons	13.60		
15 01 06	Mixed Packaging	22,909.04		
15 01 07	Glass Packaging	655.56	1,058.52	
16 05 04	Gas Cylinders		2.24	
17 01 07	C&D Inert Mixed	194.72	10,828.00	
			190.70	
			23.52	
			24.54	
17 04 01	Copper		4.63	
17 04 11	Cable	4.83		
17 05 04	C&D Inert Mixed	5,859.27	68.70	
	Soil & Stones	55.36		
17 06 05	Asbestos	0.74		
17 08 02	Plasterboard	18.35		
19 05 01	Non composted Fractions		13.14	
19 08 99	Grit	91.80		
19 12 04	Rubber		7.48	
19 12 07	Wood	19.98		
19 12 09	Fines C&D	23.96	80.70	
			22.02	
	Fines C&I	18.40	6,533.89	
			9,219.09	

EWC	Description	Waste In	Waste Out	
19 12 12	C&I Dry Mixed	3,100.33	15,302.01	
			95.56	
			5,424.58	
	MSW Municipal Mixed	17,254.78	42,657.83	
	Fines – Mech Treated Waste	1,076.60	1,240.70	
20 01 01	Cardboard & Paper	112.59	4,859.22	
			4,307.41	
	Newsprint	64.50		
	Recy Paper	449.74		
	Mixed Paper Baled			715.98
				2,037.42
				869.43
3,545.56				
20 01 02	Glass	6.04		
20 01 08	Compost	480.74		
20 01 23*	Fridge Freezer CFC		3.38	
20 01 35*	Electronics & Electrics	14.82	15.53	
			5.52	
	Electrical Equipment Monitor TVs	9.02	12.14	
20 01 38	Wood	9,233.63	469.48	
			43.38	
			1,244.02	
			40.16	
			17,019.10	
			2,388.96	
20 01 39	Plastic	6.68	59.41	
20 01 40	Metal	791.86	2,823.87	
20 02 01	Green Biodegradable Waste	3,831.84	292.88	
	Green Mixed	57.33		
20 03 01	MSW Municipal Mixed	22,175.37		
	Unbaled MSW	2.74		
20 03 07	C&I Dry Mixed	57,574.86		
	Total Received	152,695.89		
	Total Consigned		138,814.22	
	Total Recovered		64,601.80	
	Total Disposed		63,384.42	
	Total Reused on Site		10,828.00	
	Recovery Rate		54.34%	

Table 5.3 – Waste Received and Consigned since 2005

	2008	2007	2006	2005
Total Received	152,695.89	192,679.93	170,600.44	178,735.424
Total Consigned	138,814.22	198,371.37	119,836.93	110,077.96
Total Reused on Site	10,828.00	39,186.00	80,328.43	60,504
Recovery Rate	54.34	54.9%	72%	50%

6. ENVIRONMENTAL INCIDENTS AND COMPLAINTS

6.1 Incidents

The routine monitoring programme identified a number of incidents during the reporting period, mainly associated with exceedance of the landfill gas emission limit for carbon dioxide as described in Section 3. These exceedances were reported in the quarterly reports, as agreed with the Agency. A summary of the incidents is shown on Table 6.1.

There were no other reportable incidents in 2009.

Table 6.1 Summary of Incidents

Nature of Incidents	Cause	Corrective Action
Carbon dioxide > trigger limit at monitoring borehole at GS-01 in 8 events, at GS-05 in 9 events, at BH-5 in 3 events and at BH-6 in 2 events.	Possible anaerobic degradation of small quantities of organic waste.	Continue routine monitoring to determine if landfill gas is being produced and is migrating off-site.

6.2 Register of Complaints

Greenstar maintains a register of complaints received in accordance with Condition 11.7 of the waste licence. One anonymous complaint was received in 2009 in relation to an effluent odour from the facility. The complaint thought that the facility was accepting effluent however the facility does not this waste type. Greenstar investigated the complaint and found the cause to be the spreading of slurry on a nearby field by a local farmer.

7. ENVIRONMENTAL DEVELOPMENT & CONTROL

7.1 Environmental Management Programme Report

With the exception of the Schedule of Objectives and Targets, which are amended annually as part of the AER, and a revision of a number of the operating procedures, the environmental management programme was not amended in 2009. The schedule of Objectives and Targets, including their status for 2009 (Table 7.1), as well as the proposed Objectives and Targets for 2010 (Table 7.2) are presented below. An index of procedures used at the facility is included in Appendix 2. The facility is expecting to achieve OHSAS 18001/ISO 14001 accreditation in 2010.

7.1.1 *Schedule of Objectives and Targets 2009*

The 2009 Schedule included 7 objectives, which are summarised in Table 7.1. An evaluation of what has been achieved to date is presented below.

Objective 1 - Site development

Resurfacing of the skip area is now planned to take place in 2010.

Objective 2 - Maintain and improve the EMS

All actions pertaining to the EMS were undertaken. A New Integrated Management System (IMS) was developed and is currently undergoing certification. All future Environment targets & objectives will be covered under the IMS.

Objective 3 - Assess & Continually Review Resources & Energy Consumption at the site

Review of energy audit ongoing

Objective 4 - Environmental Monitoring

Objective completed

Objective 5 - Prevent Water Pollution from run-off, fire-water, flooding, etc.

Objective completed

Objective 6 - Review & Assess the Effectiveness of Nuisance Control Procedures

Objective completed

7.1.2 Site Management Structure

Details of the site management structure are given below.

Name: Aidan Shanahan

Responsibility: Head of Leinster MRF Operations.

Experience: 7 years waste management experience, 18 years operations management experience. FÁS course completed.

Name: Sara Smyth

Responsibility: Operations Manager.

Experience: 10 years waste management experience. FÁS course completed.

Name: Arthur Walsh

Responsibility: Transport & Logistics Manager.

Experience: 17 years operations management experience. FÁS course completed.

7.2 Energy Efficiency Audit Report Summary

An energy audit was carried out by Byrne Ó Cléirigh in the second half of 2008 and was submitted to the Agency on the 6th January 2009. The audit identified that Greenstar should establish an energy management programme and also install electricity meters on the diesel generator and Combined Heat and Power unit, which would improve the collection and assessment of energy data and consumption trends.

7.3 Reduction of Water Demand

In 2009, a water hydrant was repaired as it was leaking, to minimise loss through leaks.

7.4 Pollution Emission Register

The Pollution Emission Register (PER) has been replaced by the European Pollutant Release and Transfer Register Regulation (EC) No. 166/2006. A copy of the information submitted to the Agency via the web-based data reporting system is included in Appendix 3.

Table 7.1 Schedule of Objective and Targets 2009

No.	2009 Objective	Target	Responsibility	Timescale	S
1	Site development	Relay surface in the empty skip storage area with crushed stone	Site management	Q2 2009	
2	Maintain and improve the EMS	Continue to hold quarterly and annual Environmental management review meetings at the site, as required in the EMS.	Environmental Compliance	On-going	
		Update/Amend EMS documentation throughout 2008, as necessary to reflect site developments and process changes	Site Supervisors	On-going	
		Complete facility inspections on a daily basis, record non-conformances, and implement corrective action.	Site Supervisors	On-going	
		The Implementation of an Integrated Environment/Health & Safety Management System has been proposed for the site	Environmental Compliance Dept	2009	
3	Assess & Continually Review Resources & Energy Consumption at the site	Summary energy/resource usage on a quarterly basis.	Operations Manager	Q2 2009	
		Review & Implement recommendations from Energy Audit			
		Review progress made on implementing energy audit recommendations from Energy Audit.			
4	Environmental Monitoring	Ensure monitoring results comply with licence limits & investigate any exceedances of emission limit values (ELV's). Improve accessibility to the monitoring wells.	Operations Manager	Ongoing	
5	Prevent Water Pollution from run-off, fire-water, flooding, etc.	Ensure all drains and interceptors are maintained, and regularly serviced Use drain cover mats to prevent release of liquid spills to sewer	Operations Manager/ Supervisor	Ongoing	
6	Review & Assess the Effectiveness of Nuisance Control Procedures	Continually Review and assess all nuisance control procedures to ensure minimal impact on the surrounding area	Operations Manager	Ongoing	
		Continue to ensure that litter is removed at the end of each working day			

Table 7.2 Schedule of Objective and Targets 2010

No.	2010 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.	Site Management	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	Site Management	Ongoing
		Review and implement findings of Energy Audit		
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
		Continue to ensure the integrity and maintenance of all drainage infrastructure.		
5	Site development	Relay surface in the empty skip storage area with crushed stone	Site management	Q2 2010
		Upgrade Civic Amenity and Quarantine Area		
6	Obtain & improve Integrated Management System	Hold meetings as per agreed schedule	Site management	On-going
		Update & amend documentation to reflect site developments and process changes as applicable		
		Complete facility inspections and action all non conformances raised		

7.5 Tank & Pipeline Testing

No tank and pipeline testing was carried out in 2009. It is intended to carry out the testing in 2010.

7.6 Slope Stability Assessment

An assessment of the stability of the slopes was carried out in compliance with Condition 6.10 of the licence in April 2008 and was reported to the Agency as part of the 2008 AER. No further site restoration work was carried out and therefore it was not necessary to carry out a further stability assessment.

7.7 Programme for Public Information

Greenstar is 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.

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

7.8 Revised Closure, Restoration & Aftercare Management Plan

A Closure, Restoration & Aftercare Management Plan (CRAMP) was prepared and submitted to the Agency in May 2008. The CRAMP was not amended in 2009.

7.9 Measures in Relation to Prevention of Environmental Damage and Remedial Actions (Environmental Liabilities)

A revised Environmental Liabilities Risk Assessment was submitted to the Agency in June 2008 and a final report was submitted in February 2009.

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

The facility has an Environmental Management Programme (EMP) in place. The EMP serves as a guidance document for facility staff and describes operational control and management practices that are applied at the facility. The EMP is also the core element of the Environmental Management System (EMS) for the facility and is designed to ensure that management of site activities complies with regulatory requirements and best practice. The EMS includes a detailed Emergency Response Procedure which sets out the steps to be taken in the event of an incident at the facility with the potential to cause environmental damage. Greenstar also implements a comprehensive monitoring programme which will highlight any potential environmental incidents with the potential to cause environmental damage.

8. OTHER REPORTS

The Agency has technically amended the licence to allow for increased hours of operation in the Phase 1 processing building. This followed a submission by Greenstar in August 2009.

Greenstar submitted a proposal to the Agency in October 2009 for the external storage of Refuse Derived Fuel and Dry Mixed Recyclables. The proposal was agreed by the Agency on the 3rd November 2009.

Greenstar submitted a report detailing the installation of the replacement groundwater and landfill gas monitoring well (BH-6) in March 2009.

APPENDIX 1

Environmental Monitoring Summary Tables

GROUNDWATER SUMMARY TABLES

Groundwater Results 2009 Fassaro W0053-03: BH-2

Parameter	Units	1st Quarter 2009 11/02/2009	2nd Quarter 2009 05/05/2009	3rd Quarter 2009 05/08/2009	4th Quarter 2009 03/11/2009
Temperature	°C	9.9	10.2	15.8	12
Chloride	mg/l	59.5	55.2	43.15	38.7
Ammoniacal Nitrogen -N	mg/l	0.1	0.21	0.24	<0.01
Conductivity	mS/cm	2.98	3.12	2.045	3.01
Dissolved Oxygen	mg/l	9	9	7	10
pH	pH Units	7.73	8	7.76	7.61
Nitrate	mg/l			1.9	
Boron	mg/l			1.112	
Calcium	mg/l			449.3	
Potassium	mg/l			52.69	
Sodium	mg/l			78.55	
Magnesium	mg/l			47.92	
Orthophosphate	mg/l			<0.06	
Sulphate	mg/l			1446.12	
Mercury	mg/l			<0.001	
Cadmium	µg/l			<0.5	
Chromium	mg/l			0.0031	
Copper	µg/l			9	
Iron	µg/l			<20	
Manganese	µg/l			3	
Lead	µg/l			<5	
Nickel	µg/l			8	
Zinc	µg/l			<3	
VOC	µg/l			<5	
SVOC	µg/l			<10	
Pesticides	µg/l			<0.01	
Total Coliforms	cfu/100ml			>1,000	8160
Faecal Coliforms	cfu/100ml			>1,000	89

Groundwater Results 2009 Fassaroe W0053-03: BH-5

Parameter	Units	1st Quarter 2009 11/02/2009	2nd Quarter 2009 05/05/2009	3rd Quarter 2009 05/08/2009	4th Quarter 2009 03/11/2009
Temperature	°C	11.3	11.7	14.3	12
Chloride	mg/l	49.6	50.8	46.98	46.8
Ammoniacal Nitrogen -N	mg/l	0.04	0.14	0.1	<0.01
Conductivity	mS/cm	2.22	2.61	1.645	2.53
Dissolved Oxygen	mg/l	8	8.6	6	9
pH	pH Units	7.06	7.6	6.91	7.62
Nitrate	mg/l			20.1	
Boron	mg/l			0.071	
Calcium	mg/l			347.4	
Potassium	mg/l			1.7	
Sodium	mg/l			66.13	
Magnesium	mg/l			22.4	
Orthophosphate	mg/l			<0.06	
Sulphate	mg/l			827.12	
Mercury	mg/l			<0.001	
Cadmium	µg/l			<0.5	
Chromium	mg/l			<0.0015	
Copper	µg/l			<7	
Iron	µg/l			<20	
Manganese	µg/l			<2	
Lead	µg/l			<5	
Nickel	µg/l			2	
Zinc	µg/l			<3	
VOC	µg/l			<5	
SVOC	µg/l			<10	
Pesticides	µg/l			<0.01	
Total Coliforms	cfu/100ml			>1,000	5.2
Faecal Coliforms	cfu/100ml			13	0

Groundwater Results 2009 Fassaroe W0053-03: BH-7

Parameter	Units	1st Quarter 2009 11/02/2009	2nd Quarter 2009 05/05/2009	3rd Quarter 2009 05/08/2009	4th Quarter 2009 03/11/2009
Temperature	°C	9.4	9.9	11	12.5
Chloride	mg/l	33.3	29.2	28.19	29.4
Ammoniacal Nitrogen -N	mg/l	2.19	0.58	0.45	0.3
Conductivity	mS/cm	0.978	0.56	0.54	0.856
Dissolved Oxygen	mg/l	8	8.2	4	9
pH	pH Units	7.09	8.01	7.28	8.08
Nitrate	mg/l			0.7	
Boron	mg/l			<0.012	
Calcium	mg/l			88.63	
Potassium	mg/l			1.79	
Sodium	mg/l			15.29	
Magnesium	mg/l			7.51	
Orthophosphate	mg/l			<0.06	
Sulphate	mg/l			38.94	
Mercury	mg/l			<0.001	
Cadmium	µg/l			<0.05	
Chromium	mg/l			<0.0015	
Copper	µg/l			<7	
Iron	µg/l			<20	
Manganese	µg/l			59	
Lead	µg/l			<5	
Nickel	µg/l			<2	
Zinc	µg/l			<3	
VOC	µg/l			<5	
SVOC	µg/l			<10	
Pesticides	µg/l			<0.01	
Total Coliforms	cfu/100ml			>1,000	165
Faecal Coliforms	cfu/100ml			>1,000	0

SURFACE WATER SUMMARY TABLES

Surfacewater Results 2009 Fassaro W0053-03: SW-1

Parameter	Units	1st Quarter 2009 11/02/2009	2nd Quarter 2009 05/05/2009	3rd Quarter 2009 05/08/2009	4th Quarter 2009 03/11/2009
Temperature	°C	6.5	10.6	13.6	13.5
Chloride	mg/l	31.6	25.9	26.59	22.8
COD	mg/l	13	0	<7	16
BOD	mg/l	<1	2	<1	2
Ammoniacal Nitrogen -N	mg/l	0.07	0.05	0.07	<0.01
Tot. Susp. Solids	mg/l	19	<10	<10	<10
Conductivity	mS/cm	0.498	0.558	0.587	0.502
Dissolved Oxygen	mg/l	10	9	10	10
pH	pH Units	8.07	8.37	8.51	8.37
Nitrate	mg/l			14.95	
Calcium	mg/l			76.61	
Magnesium	mg/l			6.2	
Orthophosphate	mg/l			0.72	
Sulphate	mg/l			20.87	
Mercury	µg/l			<1	
Potassium	mg/l			1.58	
Sodium	mg/l			13.05	
Boron	mg/l			<0.012	
Cadmium	µg/l			<0.5	
Chromium	mg/l			<0.0015	
Copper	µg/l			<7	
Iron	µg/l			<20	
Manganese	µg/l			<2	
Nickel	µg/l			<2	
Lead	µg/l			<5	
Zinc	µg/l			<3	
VOC	µg/l			<5	
SVOC	µg/l			<10	
Pesticides	µg/l			<0.01	
Total Coliforms	cfu/100ml			>1,000	
Faecal Coliforms	cfu/100ml			>1,000	

Surfacewater Results 2009 Fassaro W0053-03: SW-2

Parameter	Units	1st Quarter 2009 11/02/2009	2nd Quarter 2009 05/05/2009	3rd Quarter 2009 05/08/2009	4th Quarter 2009 03/11/2009
Temperature	°C	5.4	10.8	13.7	13.5
Chloride	mg/l	33.8	26	24.08	22.7
COD	mg/l	15	4	<1	14
BOD	mg/l	<1	1.75	<7	1
Ammoniacal Nitrogen -N	mg/l	0.06	0.05	0.07	<0.01
Tot. Susp. Solids	mg/l	13	<10	<10	<10
Conductivity	mS/cm	0.505	0.56	0.49	0.488
Dissolved Oxygen	mg/l	10	9.6	10	10
pH	pH Units	8.23	8.45	8.7	8.38
Nitrate	mg/l			12.08	
Calcium	mg/l			61.17	
Magnesium	mg/l			5.13	
Orthophosphate	mg/l			0.31	
Sulphate	mg/l			18.48	
Mercury	µg/l			<1	
Potassium	mg/l			1.7	
Sodium	mg/l			11.62	
Boron	mg/l			<0.012	
Cadmium	µg/l			<0.5	
Chromium	mg/l			<0.0015	
Copper	µg/l			<7	
Iron	µg/l			<20	
Manganese	µg/l			<2	
Nickel	µg/l			<2	
Lead	µg/l			<5	
Zinc	µg/l			<3	
VOC	µg/l			<5	
SVOC	µg/l			<10	
Pesticides	µg/l			<0.01	
Total Coliforms	cfu/100ml			>1,000	
Faecal Coliforms	cfu/100ml			>1,000	

Surfacewater Results 2009 Fassaro W0053-03: SW-3

Parameter	Units	1st Quarter 2009 11/02/2009	2nd Quarter 2009 05/05/2009	3rd Quarter 2009 05/08/2009	4th Quarter 2009 03/11/2009
Temperature	°C	5.8	10.6	13.8	13.8
Chloride	mg/l	33.4	26.2	23.6	23.7
COD	mg/l	10	6	<7	16
BOD	mg/l	<1	2.75	<1	1
Ammoniacal Nitrogen -N	mg/l	0.07	0.06	0.11	<0.01
Tot. Susp. Solids	mg/l	11	<10	<10	<10
Conductivity	mS/cm	0.499	0.551	0.478	0.567
Dissolved Oxygen	mg/l	10	10	10	10
pH	pH Units	8.29	8.52	8.27	8.39
Nitrate	mg/l			11.86	
Calcium	mg/l			60.31	
Magnesium	mg/l			5.14	
Orthophosphate	mg/l			0.18	
Sulphate	mg/l			18.35	
Mercury	µg/l			<1	
Potassium	mg/l			1.62	
Sodium	mg/l			11.57	
Boron	mg/l			<0.012	
Cadmium	µg/l			<0.5	
Chromium	mg/l			<0.0015	
Copper	µg/l			<7	
Iron	µg/l			<20	
Manganese	µg/l			<2	
Nickel	µg/l			<2	
Lead	µg/l			<5	
Zinc	µg/l			<3	
VOC	µg/l			<5	
SVOC	µg/l			<10	
Pesticides	µg/l			<0.01	
Total Coliforms	cfu/100ml			>1,000	
Faecal Coliforms	cfu/100ml			>1,000	

Surfacewater Results 2009 Fassaro W0053-03: SW-4

Parameter	Units	1st Quarter 2009 11/02/2009	2nd Quarter 2009 05/05/2009	3rd Quarter 2009 05/08/2009	4th Quarter 2009 03/11/2009
Temperature	°C	5.8	10.6	14.1	13.7
Chloride	mg/l	32.5	26.2	23.91	23.3
COD	mg/l	10	18	<7	14
BOD	mg/l	<1	3	<1	1
Ammoniacal Nitrogen -N	mg/l	0.07	0.05	0.09	<0.01
Tot. Susp. Solids	mg/l	14	<10	<10	<10
Conductivity	mS/cm	0.499	0.561	0.482	0.508
Dissolved Oxygen	mg/l	10	9.5	10	10
pH	pH Units	8.27	8.54	8.58	8.4
Nitrate	mg/l			12.37	
Calcium	mg/l			60.49	
Magnesium	mg/l			5.12	
Orthophosphate	mg/l			0.13	
Sulphate	mg/l			19.4	
Mercury	µg/l			<1	
Potassium	mg/l			1.67	
Sodium	mg/l			11.53	
Boron	mg/l			<0.012	
Cadmium	µg/l			<0.5	
Chromium	mg/l			<0.0015	
Copper	µg/l			<7	
Iron	µg/l			<20	
Manganese	µg/l			<2	
Nickel	µg/l			<2	
Lead	µg/l			<5	
Zinc	µg/l			<3	
VOC	µg/l			<5	
SVOC	µg/l			<10	
Pesticides	µg/l			<0.01	
Total Coliforms	cfu/100ml			>1,000	
Faecal Coliforms	cfu/100ml			>1,000	

Surfacewater Results 2009 Fassaro W0053-03: SW-5

Parameter	Units	1st Quarter 2009 11/02/2009	2nd Quarter 2009 05/05/2009	3rd Quarter 2009 03/09/2009	4th Quarter 2009 03/11/2009
Temperature	°C	6.2		12.5	13
Chloride	mg/l	71.1		39.4	24.1
COD	mg/l	10		29	15
BOD	mg/l	<1		<1	1
Ammoniacal Nitrogen -N	mg/l	0.38		0.07	<0.01
Tot. Susp. Solids	mg/l	<10		8	<10
Conductivity	mS/cm	0.702		1.626	0.588
Dissolved Oxygen	mg/l	9		10	10
pH	pH Units	8.07		8.16	8.39
Nitrate	mg/l			8.8	
Calcium	mg/l			257.9	
Magnesium	mg/l			4.01	
Orthophosphate	mg/l			0.06	
Sulphate	mg/l			697.11	
Mercury	µg/l			<0.001	
Potassium	mg/l			56.36	
Sodium	mg/l			57.7	
Boron	µg/l			0.112	
Cadmium	µg/l			<0.5	
Chromium	mg/l			0.0058	
Copper	µg/l			8	
Iron	µg/l			36	
Manganese	µg/l			57	
Nickel	µg/l			15	
Lead	µg/l			<5	
Zinc	µg/l			11	
VOC	µg/l			<5	
SVOC	µg/l			<10	
Pesticides	µg/l			<0.01	
Total Coliforms	cfu/100ml			N/A	
Faecal Coliforms	cfu/100ml			N/A	

WASTEWATER SUMMARY TABLES

Wastewater Results 2009 Fassaroe W0053-03: SE-1

Parameter	units	January*	February	March**	April	May	June	July	August	September	October	November	December
pH	pH Units	N/A	6.22	N/A	6.7	6.99	8.07	N/A	N/A	8.35	7.5	7.59	7.67
Temperature	°C	N/A	4.9	N/A	12.8	-	17.8	N/A	N/A	14.5	15	14.8	6.5
BOD	mg/l	N/A	1600	N/A	360	500	488	N/A	N/A	12.5	65	63	93
COD	mg/l	N/A	2500	N/A	N/A	N/A	665	N/A	N/A	92	N/A	499	N/A
Sulphate	mg/l	N/A	315.84	N/A	N/A	N/A	24.98	N/A	N/A	707.52	N/A	366	N/A
TSS	mg/l	N/A	409	N/A	N/A	N/A	1709	N/A	N/A	8	N/A	30	N/A
Surfactants	mg/l	N/A	6.8	N/A	N/A	N/A	1.6	N/A	N/A	0.3	N/A	0.5	N/A
Oils, Fats & Greases	mg/l	N/A	4.732	N/A	N/A	N/A	99.71	N/A	N/A	0.235	N/A	1.415	N/A
Mineral Oil	mg/l	N/A	1.419	N/A	N/A	N/A	49.85	N/A	N/A	<0.01	N/A	0.283	N/A

* - It was not possible to collect a sample as the water was frozen during the site visit.

** - It was not possible to collect a sample as there was no flow at the sampling location

LEACHATE SUMMARY TABLES

Leachate Level Results 2009 Fassaroe W0053-03

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
L-01	19.1	19.12	19.11	19.11	19.17	18.97	18.85	19.17	19.2	-	-	-
L-02	-	6.98	6.98	6.98	6.98	6.98	6.98	6.98	6.98	6.98	6.98	6.98
L-03	18.64	18.65	18.64	18.64	18.59	18.21	18.36	18.59	18.5	18.59	18.5	18.5

- Inaccessible

LANDFILL GAS SUMMARY TABLES

Landfill Gas Results 2009 Fassaroo W0053-03

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sample Station Number	CH ₄ (% v/v)	CH ₄ (% v/v)	CH ₄ (% v/v)	CH ₄ (% v/v)	CH ₄ (% v/v)	CH ₄ (% v/v)	CH ₄ (% v/v)	CH ₄ (% v/v)	CH ₄ (% v/v)	CH ₄ (% v/v)	CH ₄ (% v/v)	CH ₄ (% v/v)
GS-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GS-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GS-07*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GS-08*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GS-09*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GS-10*	0.7	0.0	0.0	2.7	3.5	0.0	0.0	0.0	0.0	3.6	3.8	0.9
GS-11*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.1	0.0
BH-2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BH-5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BH-6	N/A	N/A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BH-7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
L-01*	1.6	0.0	0.0	1.4	0.6	0.0	0.0	0.0	0.0	3.1	2.9	2.9
L-02*	**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
L-03*	0.4	0.0	0.0	4.4	5.1	0.0	0.0	0.0	0.0	3.6	3.4	0.0

** Inaccessible

Landfill Gas Results 2009 Fassaroo W0053-03

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sample Station Number	CO₂ (% v/v)	CO₂ (% v/v)	CO₂ (% v/v)	CO₂ (% v/v)	CO₂ (% v/v)	CO₂ (% v/v)	CO₂ (% v/v)	CO₂ (% v/v)	CO₂ (% v/v)	CO₂ (% v/v)	CO₂ (% v/v)	CO₂ (% v/v)
GS-01	2.7	2.1	2.0	4.6	1.0	3.0	1.7	2.3	1.9	0.0	0.0	0.0
GS-05	4.3	3.7	4.0	3.1	0.2	4.1	0.0	3.6	2.3	2.1	4.0	0.0
GS-07*	2.2	2.5	5.3	4.4	4.1	6.0	7.3	9.2	8.0	3.1	7.5	4.5
GS-08*	3.6	0.5	0.0	5.1	5.6	0.0	0.0	0.0	0.0	9.4	6.6	0.0
GS-09*	3.9	0.0	0.0	3.3	4.4	0.0	0.0	0.0	0.0	4.4	6.8	0.0
GS-10*	6.1	0.8	0.8	11.0	12.0	0.0	0.0	0.0	0.0	13.0	13.0	4.4
GS-11*	4.2	2.1	2.9	4.5	9.5	0.4	1.7	1.6	1.8	7.5	12.8	4.8
BH-2	0.0	0.0	0.0	0.1	0.3	0.0	0.3	0.6	0.4	0.6	0.6	0.2
BH-5	0.2	0.0	0.0	0.6	4.1	0.0	0.0	0.0	0.0	0.3	8.2	4.1
BH-6	N/A	N/A	0.0	1.4	1.2	1.1	1.0	1.1	0.5	1.6	1.8	0.5
BH-7	0.2	0.0	0.2	0.3	0.2	0.1	0.2	0.1	0.0	0.4	0.8	0.8
L-01*	7.8	0.0	0.0	2.6	3.5	0.0	0.0	0.0	2.4	8.9	7.8	1.8
L-02*	**	1.6	0.0	6.1	7.5	0.0	0.0	0.1	0.2	11.0	10.0	6.3
L-03*	1.1	0.0	0.0	8.8	11.0	0.0	0.0	0.0	0.0	11.0	10.0	0.0

Landfill Gas Results 2009 Fassaroe W0053-03

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sample Station Number	O₂ (% v/v)	O₂ (% v/v)	O₂ (% v/v)	O₂ (% v/v)	O₂ (% v/v)	O₂ (% v/v)	O₂ (% v/v)	O₂ (% v/v)	O₂ (% v/v)	O₂ (% v/v)	O₂ (% v/v)	O₂ (% v/v)
GS-01	15.2	17.1	17.2	8.3	19.7	13.6	16.8	16.1	17.1	20.7	20.1	22.8
GS-05	16.7	16.7	15.0	18.4	21.8	15.7	21.4	15.8	16.5	18.0	17.0	22.8
GS-07*	17.8	17.1	12.8	14.5	15.9	10.9	9.7	8.8	10.1	15.8	10.9	16.2
GS-08*	16.3	21.2	21.5	13.1	13.5	21.2	21.1	21.0	21.0	7.0	11.9	22.6
GS-09*	15.1	21.3	21.5	14.4	13.3	21.3	21.1	21.1	21.1	13.3	10.7	22.5
GS-10*	10.7	19.9	19.1	0.4	0.4	21.3	21.1	21.1	21.1	0.1	0.6	10.0
GS-11*	16.4	19.7	18.3	13.7	5.9	21.1	18.4	20.1	20.1	7.9	1.1	15.9
BH-2	21.0	21.7	22.3	21.6	21.8	21.6	21.1	20.4	20.4	19.1	20.9	22.7
BH-5	20.8	21.9	22.2	20.7	14.8	21.6	21.5	21.3	21.3	20.4	5.5	12.5
BH-6	N/A	N/A	21.4	17.9	19.5	19.2	18.9	18.7	19.0	17.0	18.4	21.3
BH-7	20.8	21.5	22.4	21.7	21.8	21.6	21.6	21.4	21.0	20.4	21.4	21.0
L-01*	1.4	21.4	22.0	11.6	13.7	21.5	21.3	21.2	21.2	0.1	0.3	13.1
L-02*	**	19.2	21.5	8.3	6.0	21.2	21.1	21.0	21.0	5.2	6.0	10.2
L-03*	19.2	21.5	22.0	0.9	0.3	21.4	21.3	20.9	20.9	0.7	1.1	22.4

Landfill Gas Results 2009 Fassaroo W0053-03

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sample Station Number	Barometric Pressure (mb)	Barometric Pressure (mb)	Barometric Pressure (mb)	Barometric Pressure (mb)	Barometric Pressure (mb)	Barometric Pressure (mb)	Barometric Pressure (mb)	Barometric Pressure (mb)	Barometric Pressure (mb)	Barometric Pressure (mb)	Barometric Pressure (mb)	Barometric Pressure (mb)
GS-01	1025	1018	1011	1000	1017	1008	1016	1009	998	1019	981	998
GS-05	1025	1016	1011	1000	1015	1008	1016	1009	998	1019	981	998
GS-07*	1024	1016	1011	1000	1015	1006	1014	1009	998	1017	981	996
GS-08*	1024	1016	1011	1000	1015	1006	1014	1009	998	1017	981	996
GS-09*	1024	1016	1011	1000	1015	1006	1014	1009	998	1016	981	996
GS-10*	1024	1016	1011	1000	1015	1006	1016	1009	998	1017	981	996
GS-11*	1024	1016	1011	1000	1015	1006	1016	1009	998	1017	981	996
BH-2	1024	1018	1011	1000	1018	1008	1016	1009	998	1019	981	998
BH-5	1025	1018	1011	1000	1018	1008	1016	1009	998	1019	981	998
BH-6	N/A	N/A	1011	1000	1015	1006	1014	1009	998	1015	981	996
BH-7	1025	1018	1011	1000	1015	1008	1016	1009	998	1019	981	998
L-01*	1024	1018	1011	1000	1015	1008	1016	1009	998	1016	981	998
L-02*	**	1018	1011	1000	1015	1008	1014	1009	998	1016	981	996
L-03*	1024	1018	1011	1000	1015	1008	1016	1009	998	1016	981	996

NOISE SUMMARY TABLES

Noise Results 2009 Fassaroe W0053-03 Q1

Location	Time	Measured Noise Levels (dB re. 2x10 ⁻⁵ Pa)			Comments
		L _{Aeq}	L _{A10}	L _{A90}	
N1	1433-1503	61	63	56	Trucks through entrance and weighbridge dominant. Processing emissions within site also audible at low level. Local road traffic outside site audible, also distant traffic. Birdsong and crows. Truck idling at roundabout outside entrance 1445-1500 significant.
N2	1505-1535	59	61	53	Trucks through entrance and weighbridge dominant. Cars entering/leaving carpark passing in proximity to SLM. Processing emissions within site also audible at low level. Birdsong and crows. Truck idling on weighbridge 1514-1526 significant.
N3	1613-1643	58	54	42	Wood shredder onsite continuously audible for most of interval. No emissions audible thereafter apart from vehicle movements, including local carpark departures which significantly influenced LAeq level. Distant traffic.
N4	1539-1609	69	53	50	No facility emissions audible. Stream nearby dominant. Rustling vegetation and crows. Occasional emissions audible at low level from ESB crew working at 100 m in valley. Departing crew with ATV passed adjacent to SLM; significant intrusion.
NSL1	1355-1425	57	60	52	Trucks through entrance and weighbridge dominant. Processing emissions within site also audible at low level. Local road traffic outside site audible, also distant traffic significant. Birdsong.
NSL2	1651-1721	59	59	38	Intermittent local traffic dominant. Greenstar wood shredder continuously audible at low level. N11 traffic also audible continuously.

Noise Results 2009 Fassaroe W0053-03 Q2

Location	Time	Measured Noise Levels (dB re. 2x10 ⁻⁵ Pa)			Comments
		L _{Aeq}	L _{A10}	L _{A90}	
N1	1532-1602	60	64	50	Frequent truck movements through entrance and weighbridge area dominant. Emissions from within site slightly audible. N11 traffic continuously significant in background. Frequent traffic through roundabout outside site entrance audible. Birdsong. Aircraft.
N2	1427-1457	57	59	53	Frequent truck movements through entrance and weighbridge area dominant. No other site emissions audible, apart from continuous air handling system slightly audible between truck movements. Distant N11 traffic also audible during lulls. Crows. Aircraft.
N3	1338-1408	53	55	51	Continuous emissions audible at low level from screening plant near W boundary, and air handling system. Occasional vehicle movements audible around site, including tractor with bowser. Birdsong and crows significant. Distant N11 traffic dominant in background. Aircraft.
N4	1259-1329	49	50	48	Screen deck hum slightly audible from within site above SLM position. Also sporadic skip movements. Stream nearby dominant in background. Birdsong significant. Aircraft.
NSL1	1500-1530	55	57	52	Frequent truck movements through entrance and weighbridge area audible at moderate level. No other site emissions audible. N11 traffic to E and SE continuously significant in background. Intermittent traffic on adjacent Thornhill Road also significant. Birdsong. Rustling vegetation. Aircraft.
NSL2	1222-1252	58	60	50	N11 traffic continuously audible and dominant. Intermittent local traffic significantly busier than usual and dominant when present. No Greenstar facility emissions audible over N11 traffic apart from occasional reversing alarms and slightly audible truck movements near entrance. Repeated emissions audible from gardening activity at nearby dwelling until 1234. Birdsong and crows significant. Aircraft.

Noise Results 2009 Fassaro W0053-03 Q3

Location	Time	Measured Noise Levels (dB)			Comments
		L _{Aeq}	L _{A10}	L _{A90}	
N1	0904-0934	56	59	46	Intermittent truck movements through entrance dominant. Emissions audible at low level from continuous sources onsite, particularly office building air handling system. Offsite, regular road traffic through roundabout outside entrance audible. Birdsong. Aircraft. BSD.
N2	0800-0830	55	57	49	Intermittent truck movements through entrance and weighbridge areas dominant. Truck idling in yard audible at low level 0811-0826. FEL operation at MSW area also audible. Emissions audible at low level from continuous sources onsite, particularly office building air handling system. No other site emissions audible apart from sporadic cars passing adjacent to SLM. Birdsong. Aircraft. BSD.
N3	0937-1007	44	45	41	Truck movements through entrance slightly audible. Sporadic vehicle movements through carpark audible. Bottle tipping events audible onsite at 0938 and 0955. Continuous emissions from office building air handling system audible. Sporadic skip movements audible in lower yard. Birdsong, crows and pigeons. Aircraft. N11 traffic faintly audible. BSD significant.
N4	1009-1039	41	42	37	No site emissions audible apart from sporadic skip movements in lower yard. Birdsong and stream flow in valley dominant. BSD significant.
NSL1	0832-0902	50	52	44	Intermittent truck movements through entrance audible. Between movements, emissions audible at low level from continuous sources onsite, particularly office building air handling system. No other site emissions audible. Offsite, regular road traffic through roundabout outside entrance audible. Birdsong. Aircraft. Noise level lower than usual due to absence of through-traffic on Thornhill Road. Also, N11 traffic not audible. BSD.
NSL2	1050-1120	52	49	44	No facility emissions audible other than occasionally audible bottle tipping events and skip movements, not significant. No through-traffic on Thornhill Road due to closure. Local car x2. N11 traffic continuously audible at low level. Stream in valley, birdsong and crows. BSD to NW intrusive. Lawnmower at 50 m from 1103 significant.

Noise Results 2009 Fassaro W0053-03 Q4

Location	Time	Measured Noise Levels (dB re. 2x10 ⁻⁵ Pa)			Comments
		L _{Aeq}	L _{A10}	L _{A90}	
N1	1205-1235	60	63	51	Continuous processing emissions audible continuously. Intermittent truck movements through entrance and weighbridge area dominant. Road traffic through roundabout audible. Birdsong, rustling vegetation and aircraft.
N2	1310-1340	58	59	51	Continuous processing emissions audible, lower than at N1. Vehicle movements within site and through weighbridge area also audible. Sporadic car movements immediately adjacent to SLM. Birdsong. Distant N11 traffic noise faintly audible. Aircraft.
N3	1416-1446	50	52	47	Continuous processing emissions slightly audible. Also emissions from plant around yard, trucks through weighbridge and cars in carpark. N11 traffic audible at low level. Birdsong. Aircraft.
N4	1344-1414	46	47	45	No facility emissions audible. Water flowing in watercourse in valley continuously audible. Birdsong. Distant N11 traffic to NE slightly audible.
NSL1	1238-1308	54	57	50	Continuous processing emissions audible continuously due to breeze. Intermittent trucks through entrance audible. Intermittent traffic through roundabout and on Thornhill road significant. Birdsong. Aircraft. Rustling vegetation.
NSL2	1451-1521	62	63	49	Emissions from site slightly audible from various sources. N11 continuously audible in background. Frequent local traffic, busier than usual possibly due to school run. Birdsong. Emissions from van idling at nearby house significant 1456-1459. Compactor truck on local waste collection run dominant 1513-1518.

DUST SUMMARY TABLES

Dust Results 2009 Fassaroe W0053-03

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DS-01	99	100	138	217	149	202	72	150.89	35	235.2	211.9	1.2
DS-02	21	86	196	181	**	*	82	38.01	187	194.6	119.6	0.1
DS-03	24	153	221	320	257	236	134	89.62	137	317.3	149.6	0.4
DS-04	<10	*	287	168	128	183	*	214.98	243	**	137.6	**

* - Dust gauge broken in transit to laboratory

** - Dust gauge contaminated with bird excrement

APPENDIX 2

Procedures Index



Doc. No.: Control	Revision No.: As Shown	Issue Date: As Shown
Approved By:	Malcolm Dowling – Group Environmental Manager	Page 1 of 3
	Oliver Callan – Group H&S Manager	

Integrated Procedures - IP

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

Safety Procedures - SP

SP-01	Permit to Work Procedure	Rev 03, 10/03/10
SP-02	Maintenance & Calibration Procedure	Rev 03, 10/03/10
SP-03	Mobile Plant Procedure	Rev 02, 05/02/10
SP-04	Fork Truck Procedure	Rev 03, 10/03/10
SP-05	Operation of Fixed Plant Procedure	Rev 03, 10/03/10
SP-06	Lock Out / Tag Out Procedure	Rev 03, 10/03/10
SP-07	Health & Safety Notification Procedure	Rev 03, 10/03/10

Environmental Procedures - EP

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



Doc. No.: Control	Revision No.: 01	Issue Date: 01 st October 2009
Approved By:	Malcolm Dowling – <i>Group Environmental Manager</i> Oliver Callan – <i>Group H&S Manager</i>	Page 3 of 3

Circulation List

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2	Facility Manager, Greenstar Limited - Fassaroe - EPA Licence No W0053-03
3	Company Intranet - All Staff (Read Only Copy)

APPENDIX 3

European Pollutant Release and Transfer Register



Environmental Protection Agency

| PRTR# : W0053 | Facility Name : Greenstar Limited | Filename : W0053_2009.xls | Return Year : 2009 |

AER Returns Worksheet

Version 1.1.10

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

1. FACILITY IDENTIFICATION

Parent Company Name	Greenstar Limited
Facility Name	Greenstar Limited
PRTR Identification Number	W0053
Licence Number	W0053-03

Waste or IPPC Classes of Activity

No.	class name
3.12	Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.
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.
4.11	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.
4.2	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	Bray Depot
Address 2	La Vallee House
Address 3	Fassaroe
Address 4	Bray, Co. Wicklow
Country	Ireland
Coordinates of Location	-6.14136 53.1998
River Basin District	IEEA
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
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
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?	
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# : W0053 | Facility Name : Greenstar Limited | Filename : W0053_2009.xls | Return Year : 2009 |

01/04/2010 10:56

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

	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# : W0053 | Facility Name : Greenstar Limited | Filename : W0053_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	SW-5 Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
79	Chlorides (as Cl)	E	Estimate	Estimated based on surface area and average annual rainfall and average results	184.27435	184.27435	0.0	0.0
19	Chromium and compounds (as Cr)	E	Estimate	Estimated based on surface area and average annual rainfall and average results	0.0238215	0.0238215	0.0	0.0
20	Copper and compounds (as Cu)	E	Estimate	Estimated based on surface area and average annual rainfall and average results	32.85724	32.85724	0.0	0.0
22	Nickel and compounds (as Ni)	E	Estimate	Estimated based on surface area and average annual rainfall and average results	61.607325	61.607325	0.0	0.0
24	Zinc and compounds (as Zn)	E	Estimate	Estimated based on surface area and average annual rainfall and average results	45.178705	45.178705	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

* 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-5 Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
306	COD	E	Estimate	Estimated based on surface area and average annual rainfall and average results	73.92879	73.92879	0.0	0.0
303	BOD	E	Estimate	Estimated based on surface area and average annual rainfall and average results	4.107155	4.107155	0.0	0.0
238	Ammonia (as N)	E	Estimate	Estimated based on surface area and average annual rainfall and average results	0.9241099	0.9241099	0.0	0.0
240	Suspended Solids	E	Estimate	Estimated based on surface area and average annual rainfall and average results	32.85724	32.85724	0.0	0.0
327	Nitrate (as N)	E	Estimate	Estimated based on surface area and average annual rainfall and average results	8.1613126	8.1613126	0.0	0.0

305	Calcium	E	Estimate	Estimated based on surface area and average annual rainfall and average results	1059.2353	1059.2353	0.0	0.0
320	Magnesium	E	Estimate	Estimated based on surface area and average annual rainfall and average results	16.469692	16.469692	0.0	0.0
332	Ortho-phosphate (as PO4)	E	Estimate	Estimated based on surface area and average annual rainfall and average results	0.2464293	0.2464293	0.0	0.0
343	Sulphate	E	Estimate	Estimated based on surface area and average annual rainfall and average results	2863.1388	2863.1388	0.0	0.0
338	Potassium	E	Estimate	Estimated based on surface area and average annual rainfall and average results	231.47926	231.47926	0.0	0.0
341	Sodium	E	Estimate	Estimated based on surface area and average annual rainfall and average results	236.98284	236.98284	0.0	0.0
374	Boron	E	Estimate	Estimated based on surface area and average annual rainfall and average results	0.4600014	0.4600014	0.0	0.0
357	Iron	E	Estimate	Estimated based on surface area and average annual rainfall and average results	147.85758	147.85758	0.0	0.0
321	Manganese (as Mn)	E	Estimate	Estimated based on surface area and average annual rainfall and average results	234.10784	234.10784	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

4.3 RELEASES TO WASTEWATER OR SEWER

| PRTR# : W0053 | Facility Name : Greenstar Limited | Filename : W0053_2009.xls | Return Year : 200 01/04/2010 10:57

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				
303	BOD	C	PER	Calculated based on maximum daily flow and average results	2624.738	2624.738	0.0	0.0
306	COD	C	PER	Calculated based on maximum daily flow and average results	6197.4	6197.4	0.0	0.0
343	Sulphate	C	PER	Calculated based on maximum daily flow and average results	2333.661	2333.661	0.0	0.0
240	Suspended Solids	C	PER	Calculated based on maximum daily flow and average results	3557.4	3557.4	0.0	0.0
308	Detergents (as MBAS)	C	PER	Calculated based on maximum daily flow and average results	15.18	15.18	0.0	0.0
314	Fats, Oils and Greases	C	PER	Calculated based on maximum daily flow and average results	175.0518	175.0518	0.0	0.0
324	Mineral oils	C	PER	Calculated based on maximum daily flow and average results	113.4144	113.4144	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# : W0053 | Facility Name : Greenstar Limited | Filename : W0053_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# : W0053 | Facility Name : Greenstar Limited | Filename : W0053_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 : 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		Haz Waste : Name and Licence/Permit No of Recover/Disposer	Non Haz Waste: Address of Recover/Disposer		
Within the Country	10 02 11	Yes	0.16	Oil Filters	R5	M	Weighed	Offsite in Ireland	Enva Ltd.,W0184-01	Clonminam Industrial Estate,Portlaoise,Co. Laois,.,Ireland	Enva Ltd,W0184-01,Clonminam Industrial Estate,Portlaoise,Co. Laois,.,Ireland	Clonminam Industrial Estate,Portlaoise,Co. Laois,.,Ireland
Within the Country	13 02 08	Yes	1.1	Waste Oil	R9	M	Weighed	Offsite in Ireland	Enva Ltd. W0184-01	Clonminam Industrial Estate,Portlaoise,Co. Laois,.,Ireland	Enva Ltd,W0184-01,Clonminam Industrial Estate,Portlaoise,Co. Laois,.,Ireland	Clonminam Industrial Estate,Portlaoise,Co. Laois,.,Ireland
To Other Countries	15 01 01	No	422.62	Cardboard Packaging	R3	M	Weighed	Abroad	Cellmark Recycling Benelux BV,IRE/G003/08	Heuvel 7,NH-5664 HK,Geldrop,.,Netherlands	Cellmark Recycling Benelux BV,IRE/G003/08	Heuvel 7,NH-5664 HK,Geldrop,.,Netherlands
To Other Countries	15 01 01	No	237.18	OCC Baled	R3	M	Weighed	Abroad	Cellmark Recycling Benelux BV,IRE/G003/08	Heuvel 7,NH-5664 HK,Geldrop,.,Netherlands	Cellmark Recycling Benelux BV,IRE/G003/08	Heuvel 7,NH-5664 HK,Geldrop,.,Netherlands
To Other Countries	15 01 01	No	3128.66	OCC Baled	R3	M	Weighed	Abroad	International Recycling Ltd.,IRE/G050/08	Health House,5 Woolgate Courth,Norwich,NR2 4AP,United Kingdom	International Recycling Ltd.,IRE/G050/08	Health House,5 Woolgate Courth,Norwich,NR2 4AP,United Kingdom
To Other Countries	15 01 01	No	2413.86	OCC Baled	R3	M	Weighed	Abroad	NCH International LCC Ltd,IRE/G113/08	3 Clarendon Road,Herts,AL5 4NS,.,United Kingdom	NCH International LCC Ltd,IRE/G113/08	3 Clarendon Road,Herts,AL5 4NS,.,United Kingdom
To Other Countries	15 01 01	No	217.84	OCC Baled	R3	M	Weighed	Abroad	Parry & Evans,NOW/268322	Severn Farm Industrial Estate,Welshpool,Powys SY217KF,United Kingdom	Parry & Evans,NOW/268322	Severn Farm Industrial Estate,Welshpool,Powys SY217KF,United Kingdom
To Other Countries	15 01 01	No	499.86	OCC Baled	R3	M	Weighed	Abroad	Peute Papier Recycling BV,IRE/G006/08	Veeplaat 40,3313 LJ Dordrecht,.,.,Netherlands	Peute Papier Recycling BV,IRE/G006/08	Veeplaat 40,3313 LJ Dordrecht,.,.,Netherlands
To Other Countries	15 01 01	No	3516.56	Soft Mixed baled	R3	M	Weighed	Abroad	Cellmark Recycling Benelux BV,IRE/G003/08	Heuvel 7,NH-5664 HK,Geldrop,.,Netherlands	Cellmark Recycling Benelux BV,IRE/G003/08	Heuvel 7,NH-5664 HK,Geldrop,.,Netherlands
Within the Country	15 01 01	No	505.5	Soft Mixed baled	R13	M	Weighed	Offsite in Ireland	Marwin Environmental,926	7 Glytown Heights,Glanmire,Co. Cork,.,Ireland	Marwin Environmental,926	7 Glytown Heights,Glanmire,Co. Cork,.,Ireland
To Other Countries	15 01 02	No	20.68	Clear Plastic Baled	R13	M	Weighed	Abroad	Alternative Waste Solutions,IRE/G009/08	Unit 2 Britannia Business Park,Wallsend,Tyne and Wear,NE38 6HA,United Kingdom	Alternative Waste Solutions,IRE/G009/08	Unit 2 Britannia Business Park,Wallsend,Tyne and Wear,NE38 6HA,United Kingdom
To Other Countries	15 01 02	No	255.26	Clear Plastic Baled	R13	M	Weighed	Abroad	Greenway Ireland Ltd.,ROC 621 (NI 00611)	11 Porthill Road,Mountnorris,Co. Armagh,BT60 2TY,United Kingdom	Greenway Ireland Ltd.,ROC 621 (NI 00611)	11 Porthill Road,Mountnorris,Co. Armagh,BT60 2TY,United Kingdom
To Other Countries	15 01 02	No	132.3	Colourd Plastic Baled	R13	M	Weighed	Abroad	Greenway Ireland Ltd.,ROC 621 (NI 00611)	11 Porthill Road,Mountnorris,Co. Armagh,BT60 2TY,United Kingdom	Greenway Ireland Ltd.,ROC 621 (NI 00611)	11 Porthill Road,Mountnorris,Co. Armagh,BT60 2TY,United Kingdom
To Other Countries	15 01 02	No	790.3	Plastic Bottles	R13	M	Weighed	Abroad	Alternative Waste Solutions,IRE/G009/08	Unit 2 Britannia Business Park,Wallsend,Tyne and Wear,NE38 6HA,United Kingdom	Alternative Waste Solutions,IRE/G009/08	Unit 2 Britannia Business Park,Wallsend,Tyne and Wear,NE38 6HA,United Kingdom
To Other Countries	15 01 02	No	514.86	Plastic Bottles	R3	M	Weighed	Abroad	Cherry Polymers,IRE/G037/08	Unit 5 Nutts Corner Business Park,Dundrod Road Crumlin,Co. Antrim,BT29 4SR,United Kingdom	Cherry Polymers,IRE/G037/08	Unit 5 Nutts Corner Business Park,Dundrod Road Crumlin,Co. Antrim,BT29 4SR,United Kingdom
To Other Countries	15 01 02	No	181.54	Plastic Bottles	R13	M	Weighed	Abroad	Greenway Ireland Ltd.,ROC 621 (NI 00611)	11 Porthill Road,Mountnorris,Co. Armagh,BT60 2TY,United Kingdom	Greenway Ireland Ltd.,ROC 621 (NI 00611)	11 Porthill Road,Mountnorris,Co. Armagh,BT60 2TY,United Kingdom
To Other Countries	15 01 02	No	78.9	Plastic Bottles Baled	R13	M	Weighed	Abroad	Alternative Waste Solutions,IRE/G009/08	Unit 2 Britannia Business Park,Wallsend,Tyne and Wear,NE38 6HA,United Kingdom	Alternative Waste Solutions,IRE/G009/08	Unit 2 Britannia Business Park,Wallsend,Tyne and Wear,NE38 6HA,United Kingdom

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				
To Other Countries	15 01 02	No	53.32	Plastic Film	R13	M	Weighed	Abroad	Greenway Ireland Ltd.,ROC 621 (NI 00611)		11 Porthill Road,Mountnorris,Co. Armagh,BT60 2TY,United Kingdom			
To Other Countries	15 01 02	No	60.66	Plastic Film Clear	R13	M	Weighed	Abroad	Alternative Waste Solutions,IRE/G009/08		Unit 2 Britannia Business Park,Wallsend,Tyne and Wear,NE38 6HA,United Kingdom			
To Other Countries	15 01 02	No	98.2	Plastic Film Clear	R13	M	Weighed	Abroad	Greenway Ireland Ltd.,ROC 621 (NI 00611)		11 Porthill Road,Mountnorris,Co. Armagh,BT60 2TY,United Kingdom			
To Other Countries	15 01 02	No	192.98	Plastic Film Colour	R13	M	Weighed	Abroad	Greenway Ireland Ltd.,ROC 621 (NI 00611)		11 Porthill Road,Mountnorris,Co. Armagh,BT60 2TY,United Kingdom			
To Other Countries	15 01 02	No	51.08	Plastic Packaging	R13	M	Weighed	Abroad	Greenway Ireland Ltd.,ROC 621 (NI 00611)		11 Porthill Road,Mountnorris,Co. Armagh,BT60 2TY,United Kingdom			
Within the Country	15 01 04	No	36.16	Aluminium Cans	R4	M	Weighed	Offsite in Ireland	Davis Recycling Ltd,WP 98067		Pigeon House Road,Ringsend,Dublin 4,,Ireland			
Within the Country	15 01 04	No	33.86	Steel Cans	R4	M	Weighed	Offsite in Ireland	Davis Recycling Ltd,WP 98067		Pigeon House Road,Ringsend,Dublin 4,,Ireland			
Within the Country	15 01 06	No	69.92	Mixed Packaging	R13	M	Weighed	Offsite in Ireland	Panda Waste,WPR 021/2		12,,Ireland			
To Other Countries	15 01 07	No	1459.6	Glass Packaging	R5	M	Weighed	Abroad	Glassdon,LN/08/103		52 Creagh Road,Toomebridge,Co. Antrim,BT41 3SE,United Kingdom			
Within the Country	16 05 04	Yes	3.1	Gas Cylinders	R4	M	Weighed	Offsite in Ireland	Calor Gas,N/A		Longmile Road,Dublin 12,,,,Ireland		Calor Gas,N/A,Longmile Road,Dublin 12,,,,Ireland	Longmile Road,Dublin 12,,,,Ireland
Within the Country	17 01 07	No	17.76	C&D Inert Mixed	R5	M	Weighed	Offsite in Ireland	Cullen Excavations,N/A		Newtownmount Kennedy,Co. Wicklow,,,,Ireland			
Within the Country	17 01 07	No	25.42	C&D Inert Mixed	R5	M	Weighed	Offsite in Ireland	Greenstar Ltd.,W0165-01		Ballynagran Landfill,Coolbeg,Kilbride,Co. Wicklow,Ireland			
Within the Country	17 01 07	No	291.06	Building Materials	R5	M	Weighed	Offsite in Ireland	Greenstar Ltd.,W0165-01		Ballynagran Landfill,Coolbeg,Kilbride,Co. Wicklow,Ireland			
Within the Country	17 06 05	Yes	6.02	Asbestos	D5	M	Weighed	Offsite in Ireland	Rilta Environmental Ltd,W0192-02		Greenogue Business Park,Rathcoole,Co. Dublin,,Ireland		Rilta Environmental Ltd.,W0192-02,Greenogue Business Park,Rathcoole,Co. Dublin,,Ireland	Greenogue Business Park,Rathcoole,Co. Dublin,,Ireland
Within the Country	17 08 02	No	77.62	Plasterboard	R5	M	Weighed	Offsite in Ireland	Gypsum Recycling Ireland,WMP 238/2006		Rathcoffey,Donadea,Naas,Co. o. Kildare,Ireland			
Within the Country	19 12 03	No	8.34	Metal	R4	M	Weighed	Offsite in Ireland	Davis Recycling Ltd,WP 98067		Pigeon House Road,Ringsend,Dublin 4,,Ireland			
Within the Country	19 12 07	No	1341.97	Wood	R3	M	Weighed	Offsite in Ireland	Greenstar Ltd.,W0165-01		Landfill,Coolbeg,Kilbride,Co. Wicklow,Ireland			
Within the Country	19 12 07	No	134.78	Wood	R3	M	Weighed	Offsite in Ireland	Miltown Composting,WP 019-02		Miltownmore,Fethard,Co. Tipperary,,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	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 07	No	15165.15	Wood	R3	M	Weighed	Offsite in Ireland	Ormonde Organics Ltd.,W0237-01		Unit 643 Greenogue Industrial Estate,Rathcoole,Co. Dublin,,Ireland			
Within the Country	19 12 07	No	297.28	Wood	R3	M	Weighed	Offsite in Ireland	Waddock Composting,WP11/04		Killamaster,Co. Carlow,,Ireland			
Within the Country	19 12 09	No	4469.34	Fines C&I	R5	M	Weighed	Offsite in Ireland	KTK Landfill,W0081-02		Kilcullen,Co. Kildare,,Ireland			
Within the Country	19 12 09	No	8079.17	Fines C&I	R5	M	Weighed	Offsite in Ireland	Greenstar Ltd.,W0165-01		Ballynagran Landfill,Coolbeg,Kilbride,Co. Wicklow,Ireland			
Within the Country	19 12 09	No	804.46	Building Materials	R5	M	Weighed	Offsite in Ireland	KTK Landfill,W0081-02		Kilcullen,Co. Kildare,,Ireland			
Within the Country	19 12 09	No	2740.34	Building Materials	R5	M	Weighed	Offsite in Ireland	Greenstar Ltd.,W0165-01		Ballynagran Landfill,Coolbeg,Kilbride,Co. Wicklow,Ireland			
Within the Country	19 12 12	No	12.18	C&I Dry Mixed	R13	M	Weighed	Offsite in Ireland	Greenstar Ltd.,W0183-01		Millennium Business Park,Ballycoolin,Dublin 11,,Ireland			
Within the Country	19 12 12	No	20275.08	C&I Dry Mixed	D5	M	Weighed	Offsite in Ireland	Greenstar Ltd.,W0165-01		Ballynagran Landfill,Coolbeg,Kilbride,Co. Wicklow,Ireland			
Within the Country	19 12 12	No	40733.43	MSW Municipal Mixed	D5	M	Weighed	Offsite in Ireland	Greenstar Ltd.,W0165-01		Ballynagran Landfill,Coolbeg,Kilbride,Co. Wicklow,Ireland			
Within the Country	19 12 12	No	25.46	LDF Activated Carbon	D5	M	Weighed	Offsite in Ireland	Greenstar Ltd.,W0165-01		Ballynagran Landfill,Coolbeg,Kilbride,Co. Wicklow,Ireland			
To Other Countries	20 01 01	No	74.1	News & Pams Baled	R3	M	Weighed	Abroad	International Recycling Ltd.,IRE/G050/08		Heath House,5 Woolgate Courth,Norwich,NR2 4AP,United Kingdom			
To Other Countries	20 01 01	No	252.64	Mixed Paper Baled	R3	M	Weighed	Abroad	Cellmark Recycling Benelux BV,IRE/G003/08		Heuvel 7,NH-5664 HK,Geldrop,,Netherlands			
To Other Countries	20 01 01	No	2649.46	Mixed Paper Baled	R3	M	Weighed	Abroad	International Recycling Ltd.,IRE/G050/08		Heath House,5 Woolgate Courth,Norwich,NR2 4AP,United Kingdom			
Within the Country	20 01 01	No	534.58	Mixed Paper Baled	R13	M	Weighed	Offsite in Ireland	Marwin Environmental,926 Peute Papier Recycling BV,IRE/G006/08		7 Glyntown Heights,Glanmire,Co. Cork,,Ireland			
To Other Countries	20 01 01	No	6095.22	Mixed Paper Baled	R3	M	Weighed	Abroad	Cellmark Recycling Benelux BV,IRE/G003/08		Veeplaat 40,3313 LJ Dordrecht,,Netherlands			
Within the Country	20 01 02	No	482.72	Glass	R5	M	Weighed	Offsite in Ireland	Glassco Recycling,WP 160/2004		Oberstown Business Park,Naas,Co. Kildare,,Ireland			
Within the Country	20 01 21	Yes	0.04	Fluorescent Tubes	R5	M	Weighed	Offsite in Ireland	Irish Lamp Recycling Co. Ltd.,COR-KE-08-0004-01		Woodstock Industrial Estate,Athy,Co. Kildare,,Ireland		Irish Lamp Recycling Co Ltd,COR-KE-08-0004-01,Woodstock Industrial Estate,Athy ,Co. Kildare,,Ireland	Woodstock Industrial Estate,Athy ,Co. Kildare,,Ireland
Within the Country	20 01 23	Yes	3.2	Fridge Freezer CFC	R4	M	Weighed	Offsite in Ireland	KMK Metals Recycling Ltd.,W0113-01		Cappincur Industrial Estate,Daingean Road,Tullamore,Co. Offaly,Ireland		KMK Metals Ltd.,W0113-01,Cappincur Industrial Estate,Daingean Road,Tullamore,Co. Offaly,Ireland	Cappincur Industrial Estate,Daingean Road,Tullamore,Co. Offaly,Ireland
Within the Country	20 01 27	Yes	5.64	Domestic Waste	R5	M	Weighed	Offsite in Ireland	Rilta Environmental Ltd,W0192-02		Greenogue Business Park,Rathcoole,Co. Dublin,,Ireland		Rilta Environmental Ltd.,W0192-02,Greenogue Business Park,Rathcoole,Co. Dublin,,Ireland	Greenogue Business Park,Rathcoole,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	20 01 35	Yes	24.21	TV Monitors	R5	M	Weighed	Offsite in Ireland	Immark Ltd.,W0185-01		Greenogue Industrial Estate,Rathcoole,Co. Dublin,,Ireland	Kilcullen,Co. Kildare,,Ireland	Immark Ltd.,W0185-01,Greenogue Industrial Estate,Rathcoole,Co. Dublin,,Ireland	Greenogue Industrial Estate,Rathcoole,Co. Dublin,,Ireland
Within the Country	20 01 38	No	41.56	Wood	R3	M	Weighed	Offsite in Ireland	KTK Landfill,W0081-02		Waddock	Killamaster,Co. Carlow,,Ireland		
Within the Country	20 01 38	No	82.82	Wood	R3	M	Weighed	Offsite in Ireland	Composting,WP11/04		11 Porthill Road,Mountnorris,Co. Armagh,BT60 2TY,United Kingdom			
To Other Countries	20 01 39	No	63.51	Plastic	R13	M	Weighed	Abroad	Greenway Ireland Ltd.,ROC 621 (NI 00611)					
Within the Country	20 01 40	No	5.81	Copper Wire	R4	M	Weighed	Offsite in Ireland	Davis Recycling Ltd,WP 98067		Pigeon House Road,Ringsend,Dublin 4,,Ireland			
Within the Country	20 01 40	No	2492.3	Aluminium	R4	M	Weighed	Offsite in Ireland	Davis Recycling Ltd,WP 98067		Pigeon House Road,Ringsend,Dublin 4,,Ireland			
Within the Country	20 02 01	No	43.22	Green Biodegradable Waste	R3	M	Weighed	Offsite in Ireland	Enrich Environmental,WMP 2004/57			Kilcock,Co. Kildare,,Ireland		

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