

ANNUAL ENVIRONMENTAL REPORT
FOR GREENSTAR LTD.
SARFIELD COURT, CORK
LICENCE NO. W0136-02
JANUARY 2011 – DECEMBER 2011

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1. INTRODUCTION

This is the 2011 Annual Environmental Report (AER) for Greenstar Ltd's (Greenstar) Materials Recovery Facility (MRF) located at Sarsfieldcourt Industrial Estate, Glanmire, County Cork.

The report covers the period from the 1st January 2011 to the 31st December 2011. The content of the AER is based on Schedule H of the Waste Licence (W0136-02) and the report format follows guidelines set in the "Guidance Note for Annual Environmental Report" issued by the Environmental Protection Agency (Agency)¹. Cognisance was also taken of the Agency AER Draft Guidance Document issued in January 2012².

¹ EPA (Environmental Protection Agency) 1999 Waste Licensing – Draft Guidance on Environmental Management Systems and Reporting to the Agency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 situated within the Sarsfieldcourt Industrial Estate, approximately 8 km northeast of Cork City and 5 km north of Glanmire in the townland of Sarsfieldcourt. The site occupies 1.56 ha and comprises one MRF building and ancillary infrastructure, including administration offices, yard and parking areas and a vehicle wash.

2.2 Waste Management Activities

The licence allows Greenstar to accept and process 99,017 tonnes of waste per annum, comprising commercial/industrial non-hazardous waste, household waste, source separated biodegradable waste for composting and construction and demolition wastes. All waste processing takes place inside the waste transfer building, as specified in Condition 5.1 of the licence.

2.2.1 Waste Types & Processes

The facility is licensed to accept the following waste types and quantities, as specified in Schedule A of the Licence: -

Household (42,129 tonnes)

Commercial & Industrial (47,130 tonnes)

Construction & Demolition (4,758 tonnes)

Source separated biodegradable waste for composting (5,000 tonnes), however composting is not currently carried out.

The maximum tonnage of each waste type accepted, except the source separated biodegradable waste for composting, may be altered with the prior agreement of the Agency as long as the total maximum tonnage is not exceeded.

The key processes carried out at the facility include: -

Segregation of recyclable materials (paper, cardboards, plastic, wood, metals, glass);

Segregation and bulking of C&D waste;

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

Separation of organic fines from MSW waste by shredding and trommelling of the waste;

Bulking of material for transfer to appropriately licensed recycling, recovery and disposal outlets.

Household Waste

Mixed household waste delivered in refuse collection vehicles is transferred to large bulk transporters, once food waste has been extracted using the shredder and trommel, and is then sent to an appropriate licensed landfill. Greenstar also provides a skip hire service to private individuals in the Cork Region. All skips arriving at the facility are netted or covered. Recyclable material is segregated, where possible, from the waste and transferred off-site to suitable licensed or permitted recycling facilities. The remaining non-recyclable and residual material is sent to licensed landfills post processing.

Commercial and Industrial Waste

Greenstar provides skips of various sizes to a wide range of commercial and industrial premises in the Cork Region. Recyclable material is segregated, where possible, from the waste stream and transferred to suitable recycling facilities. The remaining non-recyclable and residual material is sent to licensed landfills.

In addition Greenstar provides a source segregation service for those clients which generate large quantities of commercial and industrial waste. Trained Greenstar staff sort and segregate waste at source and the waste is then collected in skips or bulker vehicles and appropriately transported. All material is transported to the Sarsfieldcourt facility and off-loaded in designated areas and stored pending consignment to recycling facilities or to a licensed landfill.

Construction and Demolition Waste

Construction and demolition material arrives on-site in skips of varying sizes. The loads are inspected and segregated on-site. Recoverable materials are extracted and sent off-site either for re-use or recycling. The non-recyclable materials are transferred to a licensed landfill.

Biodegradable waste for composting

The facility is allowed to compost up to 5,000 tonnes/year of source separated biodegradable waste for composting. However, Greenstar has not yet started composting. Biodegradable wastes suitable for composting which is accepted at the facility are sent to an offsite composting facility.

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 Existing Plant

No.	Plant	Model	Operational Capacity	Standby Capacity
1	Tromel	Waltec	80 t/hr	0
10	Conveyor Lines	Generic	80 t/hr	0
1	Baler	Bollegraff	Not in use	0
1	Selector Grab	Liebherr L904	100 t/hr	0
1	Loading Shovel	Liebherr L544	70 t/hr	0
1	Wheel Wash	Eurojet	168 hr/wk	0
1	Picking Line	7-bay sorting line	Not in Use	N/A
1	Weighbridge – 2 Scales	-	56 hr/wk	56 hr/wk
1	Fork Lift	Jungheinrich 3.0 tonnes	60 hr/wk	60 hr/wk
2	Fork Lift	Jungheinrich 2.5 tonnes	60 hr/wk	60 hr/wk
1	Fork Lift	Jungheinrich 3.5 tonnes	60 hr/wk	60 hr/wk
1	Shredder/Bag Opener	M&J 2000	80 t/hr	0

3. EMISSION MONITORING

Greenstar implements the comprehensive environmental monitoring programme specified in the licence to assess the significance of emissions from site activities. The programme includes surface water, wastewater, groundwater, noise and dust monitoring. The monitoring locations are shown on Figure 3.1.

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

3.1 Surface Water Monitoring

Surface water monitoring was carried out quarterly at three locations (SW-1, SW-2 and SW-3). SW-3 is the discharge point from the facility to a stream approximately 100 metres from the eastern boundary of the site. SW-2 is located to the north and upstream of the discharge point and SW-1 is located to the south and downstream of the outfall.

The range of analysis includes pH, electrical conductivity, Chemical Oxygen Demand (COD), Biological Oxygen Demand (BOD), total organic carbon (TOC), ammoniacal nitrogen, dissolved oxygen, total suspended solids (TSS), mineral oils and oils, fats and greases. The results are presented in Tables 3.1 to 3.3.

The Emission Limit Value (ELV) and Trigger Levels apply solely to the discharge from the facility (SW-3). The facility was 100% compliant with the ELVs and Trigger Levels. The quality of the water in the stream is generally good and is not being impacted by facility activities.

The Agency carried out surface water monitoring in September 2006 and in a letter dated the 8th January 2007 (ref W0136-02/GC06SMcD) requested Greenstar to include nitrate and nitrite in the parameters measured. Total and faecal coliforms were added to the monitoring programme in Q3 2009, also at the Agency's request. The nitrate levels measured in SW-3 in all monitoring events in 2011 were low and were below those detected by the Agency in 2006. Total and faecal coliforms were detected in the stream and at SW-3 on all monitoring occasions. The results indicate that the discharge is not having a significant effect on water quality in the receiving stream.

Table 3.1 Surface water Monitoring Results 2011: SW-1

Parameter	Units	Q1	Q2	Q3	Q4
pH	pH units	7.95	8.27	8.03	8.06
Conductivity	mS/cm	0.244	0.29	0.259	0.134
Temperature	°C	9.2	13.7	16.2	11.4
BOD	mg/l	<2	<1	<1	<1
COD	mg/l	<15	<7	<7	<7
Ammoniacal Nitrogen	mg/l	0.02	0.03	0.08	0.03
Dissolved Oxygen	mg/l	11	11	9	10
TOC	mg/l	7	7	4	15
TSS	mg/l	<10	<10	<10	<10
Oils, Fats & Greases	mg/l	<0.01	<0.01	<0.01	<0.01
Nitrate as NO ₃	mg/l	27.1	5.5	11.8	25.7
Nitrite as NO ₂	mg/l	<0.02	<0.02	<0.02	<0.02
Mineral Oils	mg/l	<0.01	<0.01	<0.01	<0.01
Total Coliforms	cfu/100ml	460	2,400	1,100	460
Faecal Coliforms	cfu/100ml	75	2,400	460	240

Table 3.2 Surface water Monitoring Results 2011: SW-2

Parameter	Units	Q1	Q2	Q3	Q4
pH	pH units	8.1	8.27	8.12	8.04
Conductivity	mS/cm	0.232	0.254	0.238	0.228
Temperature	°C	9.2	13.4	16.1	11.3
BOD	mg/l	<2	<1	<1	<1
COD	mg/l	<15	<7	<7	9
Ammoniacal Nitrogen	mg/l	0.02	0.05	0.05	0.05
Dissolved Oxygen	mg/l	11	11	9	10
TOC	mg/l	7	10	6	17
TSS	mg/l	<10	<10	<10	25
Oils, Fats & Greases	mg/l	<0.01	<0.01	<0.01	<0.01
Nitrate as NO ₃	mg/l	27.5	5.5	12	25.9
Nitrite as NO ₂	mg/l	<0.02	<0.02	<0.02	<0.02
Mineral Oils	mg/l	<0.01	<0.01	<0.01	<0.01
Total Coliforms	cfu/100ml	460	460	240	93
Faecal Coliforms	cfu/100ml	460	460	43	93

Table 3.3 Surface water Monitoring Results 2011: SW-3

Parameter	Units	Q1	Q2	Q3	Q4	Trigger Levels	Emission Limit
pH	pH units	8.25	8.66	8.26	8.44	N/A	N/A
Conductivity	mS/cm	0.43	0.452	0.406	0.211	N/A	N/A
Temperature	°C	9.4	12.1	15.6	11.6	N/A	N/A
BOD	mg/l	3	3	5	<1	25	N/A
COD	mg/l	<15	<7	12	<7	N/A	N/A
Ammoniacal Nitrogen	mg/l	0.5	0.24	2.41	0.16	N/A	N/A
Dissolved Oxygen	mg/l	8	6	8	8	N/A	N/A
TOC	mg/l	7	5	8	19	N/A	N/A
TSS	mg/l	<10	<10	10	<10	35	N/A
Oils, Fats & Greases	mg/l	<0.01	<0.01	<0.01	<0.01	N/A	N/A
Nitrate as NO ₃	mg/l	19.6	4.2	5.2	15.7	N/A	N/A
Nitrite as NO ₂	mg/l	0.12	0.14	0.53	0.09	N/A	N/A
Mineral Oils	mg/l	<0.01	<0.01	<0.01	<0.01	N/A	5
Total Coliforms	cfu/100ml	4600	110,000	11,000	24,000	N/A	N/A
Faecal Coliforms	cfu/100ml	4600	2,400	4,600	11,000	N/A	N/A

3.2 Groundwater Monitoring

There are two groundwater monitoring wells located up and down gradient of site activities. The licence specifies annual groundwater monitoring however the Agency requested Greenstar to increase the monitoring frequency to biannually in a letter dated the 8th January 2007 (ref W0136-02/GC06SMcD). As with the surface water monitoring, the Agency requested that nitrite and nitrate be included in the list of parameters to be analysed for in the groundwater samples. Groundwater monitoring was carried out biannually at two locations (W-1 and W-2) in Q2 and Q4 2011. The direction of groundwater flow is considered to be from west to east towards the stream, which flows along the eastern side of the Industrial Estate. W-2 is at the upgradient and W-1 is at the downgradient side of the site.

The range of analysis included TOC, pH, electrical conductivity, ammoniacal nitrogen, total suspended solids and mineral oils, plus the additional parameters requested by the Agency. There are no Emission Limit Value (ELV) and Trigger Levels. The tables also include the EPA Interim Guideline Values (IGVs) which were published in May 2003. The IGV levels represent typical background or unpolluted conditions. However, the Agency recognises that levels higher than the IGV may occur naturally depending on the local geological and hydrogeological conditions. The results are included on Tables 3.4 and 3.5.

The quality of the groundwater was good and generally consistent with the previous monitoring carried out. The results were all below the relevant IGV levels. The results indicate that the facility is having no impact on groundwater.

Table 3.4 Groundwater Monitoring Results 2011: W-1

Parameter	Units	Q2	Q4	IGV
pH	pH units	8.17	7.70	6.5-9.5
Conductivity	mS/cm	0.223	0.210	1
Temperature	°C	12.3	12.3	-
TOC	mg/l	6	13	NAC
Ammoniacal Nitrogen	mg/l	<0.03	0.02	0.12
TSS	mg/l	32	198	N/A
Nitrate as NO ₃	mg/l	3.7	2.5	25
Nitrite as NO ₂	mg/l	<0.02	<0.02	0.1
Mineral Oils	mg/l	<0.01	<0.01	0.01

Table 3.5 Groundwater Monitoring Results 2011: W-2

Parameter	Units	Q2	Q4	IGV
pH	pH units	7.76	6.98	6.5-9.5
Conductivity	mS/cm	0.149	0.149	1
Temperature	°C	12.8	11.5	-
TOC	mg/l	6	10	NAC
Ammoniacal Nitrogen	mg/l	<0.03	0.02	0.12
TSS	mg/l	2070	1571	N/A
Nitrate as NO ₃	mg/l	3.5	7.9	25
Nitrite as NO ₂	mg/l	<0.02	<0.02	0.1
Mineral Oils	mg/l	<0.01	<0.01	0.01

3.3 Wastewater Monitoring

Wastewater generated on site is directed to a holding tank located to the east of the site security hut weighbridge building. The accumulated liquid is removed off-site as required to an appropriate wastewater facility for treatment. The volume of wastewater removed in 2011 was 1332.50 tonnes and is shown on Table 5.1 (under EWC code 19 08 05).

Wastewater monitoring was undertaken biannually. The range of analysis was as specified in Schedule D of the Waste Licence and included pH, BOD, COD, ammoniacal nitrogen, total suspended solids and mineral oils. There are no ELV or Trigger levels set for wastewater. The results indicate that the wastewater is suitable for treatment at the off-site wastewater treatment plant. The results are included on Table 3.6.

Table 3.6 Wastewater Monitoring Results 2011

Parameter	Units	Q1	Q3
Temperature	°C	8.8	17.7
pH	pH units	8.14	7.19
Conductivity	mS/cm	1.299	0.662
BOD	mg/l	530	605
COD	mg/l	1053	3240
Ammoniacal Nitrogen	mg/l	22.89	5.19
TSS	mg/l	107	478
Mineral Oils	mg/l	<0.01	36.52

3.4 Noise Survey

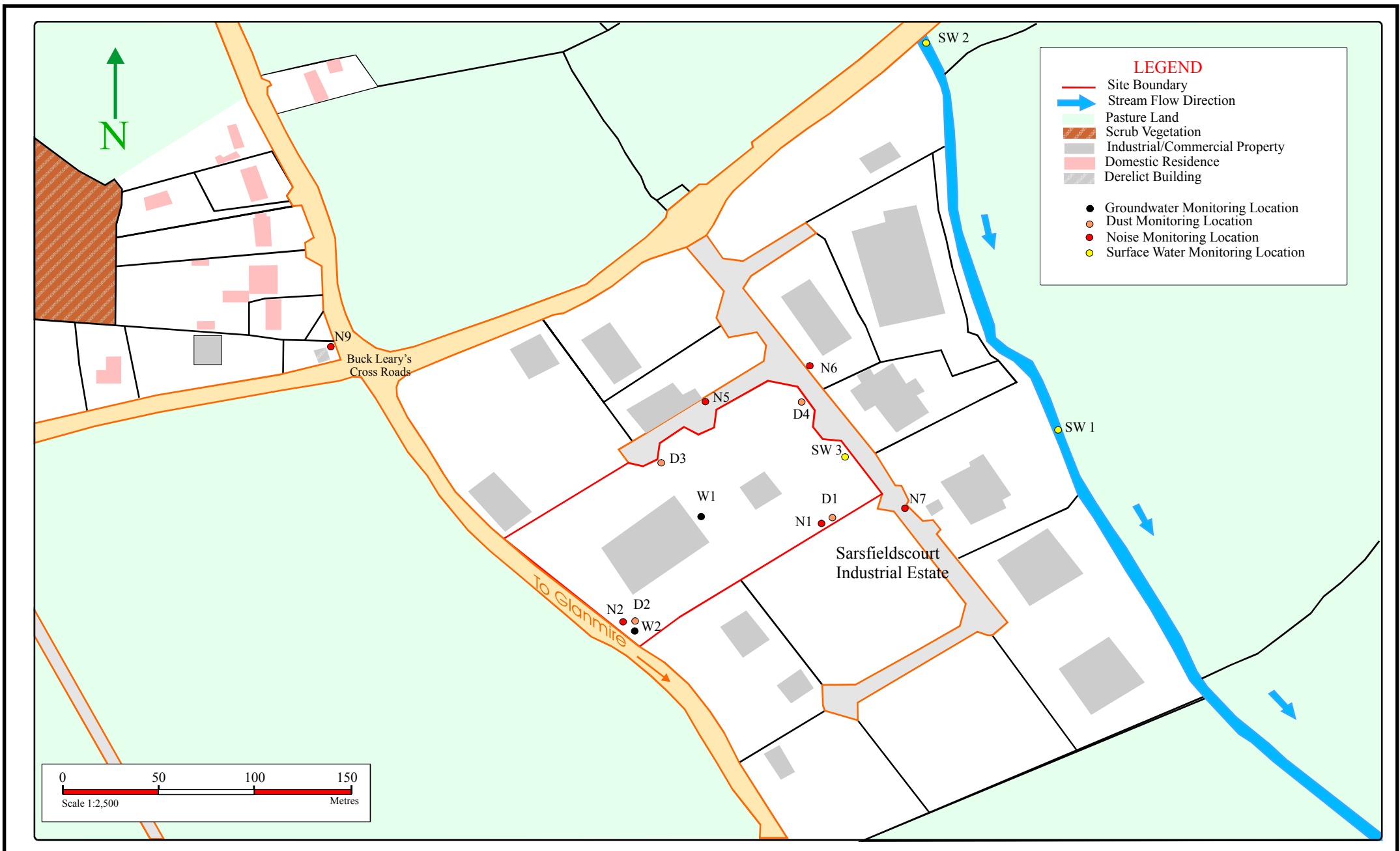
A noise survey is carried out annually at the facility. This was conducted in August 2010. Monitoring was carried out at five noise monitoring locations, N-1, N-2, N-5, N-6 and N-7 specified in the licence and one off-site noise sensitive location N-9. The survey concluded that the facility was fully compliant with its licence requirements. The results are included on Table 3.7.

The licence specifies a daytime noise emission limit of 55 dB at all monitoring locations. Most waste licences however currently issued by the Agency state that specified noise limits should apply to noise sensitive locations only. Given that the Greenstar facility is located in a busy industrial estate, it is considered practical to adopt this approach. Therefore the noise limits of 55 dB daytime and 45 dB night-time limits have been applied to the offsite noise sensitive location N9. Noise emissions from the nearest industrial premises contributed to the noise environment at N9, however no emissions were audible from the Greenstar facility.

Table 3.7 Noise Monitoring Results 2011

Station	Time	LAeq 30 min dB	LAF10 30 min dB	LAF90 30 min dB	Specific level* dB	Noise audible
N1	0901-0931	65	66	50	65	Intermittent truck movements through entrance and weighbridge area dominant when present. Loader and forklift movements in yard areas also audible. Air management system on N facade continuously audible, with regular impulses due to blowdown. Offsite, occasional forklift and truck movements audible at adjacent premises. Intermittent vehicle movements audible on commercial estate roadway.
N2	0828-0858	60	62	58	60	Greenstar gen-set emissions continuously audible at low level, and dominating background. Loader, forklift and trucks dominant when manoeuvring in this area of yard. No offsite noise audible apart from intermittent road traffic slightly audible outside boundary.
N5	1048-1118	59	56	48	51	Greenstar air management system continuously clearly audible and dominant. Impulsive blowdown emissions also audible. No other site noise audible here apart from occasional noise from cherry picker in use near N corner of main building, dominant when present. Noise from N end of commercial estate almost continuously audible, including truck movements at adjacent premises, grinder and minor construction activity at nearby premises. Occasional traffic passing on estate roadway dominant when present. Offsite road traffic slightly audible. Bird song/calls and aircraft.
N6	1015-1045	61	61	44	44	Greenstar air management system continuously slightly audible in background. Blowdown noise also audible regularly. Truck movements through entrance and weighbridge area audible. Noise environment dominated by almost continuously audible emissions from various sources at N end of commercial estate, including frequent truck movements, grinder emissions, compressor noise, etc. Passing vehicles on commercial estate roadway dominant when present. Road traffic noise to N audible. Bird song/calls and aircraft.
N7	0935-1007	60	61	44	43	No emissions audible from Greenstar facility, apart from intermittent truck movements through entrance, due to dominance of emissions from adjacent premises until 1000 when ceased. Thereafter, continuous air management system emissions at Greenstar and mobile plant on yard audible at low level. Intermittent vehicle movements on commercial estate roadway dominant when present. Bird calls. Grinder in occasional use at nearby premises. Paused once to allow local vehicle access.

*Specific level: Sound pressure level contribution considered attributable to facility, determined using real time assessment, field notes, time history profiles, statistical analysis, frequency spectra, near field correction if applicable, and other parameters.



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CLIENT

Greenstar Ltd

TITLE

Sarsfieldscourt
 Monitoring Locations

Details

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FIGURE NUMBER

3.1

Scale

Not To Scale

Revision

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3.5 Dust Monitoring

The facility conducts dust monitoring on three occasions annually. This was undertaken during May/June, June/July and July/August 2011 at four on-site locations (D-1, D-2, D-3 and D-4). The licence requires that two of these monitoring events be carried out between May and September. The results are included in Table 3.8.

There were no exceedances of the dust deposition limit (350 mg/m²/day) set in the Licence at any of the monitoring locations during any of the monitoring events in 2011.

Table 3.8 Dust Monitoring Results 2011

	May/June mg/m ² /day	June/July mg/m ² /day	July/August mg/m ² /day	Deposition Limit mg/m ² /day
D-1	166.9	144.2	142.9	350
D-2	67.1	52.5	63.1	350
D-3	67.6	65.9	28.7	350
D-4	140.2	120.0	100.5	350

3.6 Nuisance Control Review

Greenstar installed and commissioned an air emission abatement system in the MRF building in 2006. The system is designed to control dust and odour emissions from within the MRF building. In 2007 two deep bed carbon filters were removed and replaced with two 45,000 m³/hr annular vessels. This eliminates any possibility of carbon shifting and bed fluidisation. New automatic fast acting doors were installed on both the tunnel entrance and exit and the in and out doorways in the MRF. These systems in the main worked successfully since 2007. The carbon serving the odour abatement system filters was replaced in 2011. A smoke test was also carried out in March 2011 to assess the air tightness of the building fabric and the recommendations of the report are in the process of being implemented.

Other nuisance controls include an Odour Management Plan which involves routine monitoring of the air emission abatement system, routine inspections and litter patrols, cleaning of site roads and yard areas, closing of the facility doors when not in use – these are electronic and sensed, vermin control (Quality Pest) and internal processing of wastes.

Greenstar has introduced an Integrated Management System (IMS) and as part of this has developed a list of environmental management procedures, details of which are outlined in Section 7 and include nuisance control measures.

4. SITE DEVELOPMENT WORKS

4.1 Engineering Works

Table 4.1 and Table 4.2 show the development works carried out in 2011 and those proposed for 2012.

Table 4.1 Site Infrastructural Works Carried Out in 2011

Description of Works	Scheduled Date of Completion	Completion Date
MRF Sealing Project (Odour Control)	Q1 2011	31 st March 2011
Upgrade of Business Management System (BMS) configuration	Q2 2011	1 st December 2011
Addition of fast acting doors and pedestrian doors to BMS system	Q2 2011	1 st December 2011
Upgrade of ESB substation	Q4 2011	Moved to Q4 2012
Set up of Civic Amenity Site	Q4 2011	Moved to Q4 2011 pending licence review

Table 4.2 Site Infrastructural Works Proposed for 2012

Description of Works	Scheduled Date
Upgrade to ESB substation	Q4 2012
Set up of Civic Amenity Site (Pending Licence Review)	Q4 2012
Installation of a C&D holding bay	Q1 2012
Installation of Hoffman baler	Q1 2012
Installation of Bolgraff baler	Q2 2012
Installation of bale wrapper	Q2 2012
Implement Traffic Management Plan including Pedestrian Walkways	Q2 2012

4.2 Summary of Resource & Energy Consumption

Table 4.3 presents an estimate of the resources used on-site during the reporting period.

Table 4.3 Estimates of Resources Used On-Site in 2011

Resources	Quantities
Road Diesel	707000 litres
Gas Oil	147157 litres
Gear Oil	20 litres
Ad Blue	5000 litres
Hydraulic, Transmission, Engine Oil	2825 litres
Anti Freeze	120 litres
Electricity	185,000 units
Truck Wash Detergent	105 litres
Carbon	27000 kg

4.3 Bund Integrity Test

Bund testing is carried out every three years. The bunds and tanks were tested in July 2009 and integrity confirmed and so were passed fit for purpose. Testing will be carried out again in 2012.

5. WASTE RECEIVED AND CONSIGNED FROM THE FACILITY

Table 5.1 shows the total quantities of waste received and consigned from the facility in 2011. For comparative purposes the amounts of waste received and consigned in 2010 are presented in Table 5.2. Table 5.3 shows the quantities of waste received and consigned in previous years. A breakdown of the waste types is provided in accordance with the European Waste Catalogue and Hazardous Waste (EWC/HWL) list. A more detailed description of the wastes accepted and consigned are provided in the PRTR submission in Appendix 3.

The total amount received in 2011 was 67,621.25 tonnes. The total amount consigned was 69,848.90 tonnes. The difference consists of waste which remained on site at the end of 2010 and was consigned in 2011, 1,332.50 tonnes of liquid waste and 27 tonnes of activated carbon which were generated onsite in 2011. All the wastes consigned from the site went to recovery and disposal facilities agreed with the Agency.

Greenstar applied for a Waste Licence Review in July 2010. The intention of this review is to extend the waste acceptance and operational hours to allow for 24 hour waste acceptance and operation, for the operation of a Civic Amenity Centre and to increase the waste acceptance limits pro-rata from 99,017 to 200,000 tonnes per annum. The waste types will remain the same as the current licence (household, construction & demolition, commercial and industrial and biodegradable non-hazardous wastes). In addition Greenstar have sought to remove the existing requirement to achieve a 50% recovery rate and to revise the compliance locations for noise emission limits from the site boundary to the nearest noise sensitive locations as is best practice. The recycling rate has reduced in recent years due to the increase in mixed municipal waste (MSW) accepted at the facility and the reduction in recyclables which are diverted to the adjacent specialised facility Glyntown Enterprises Ltd. Sarsfieldcourt Industrial Estate, Glanmire.

Table 5.1 Waste Received & Consigned 2011

EWC	Description	Waste In	Waste Out
01 03 08	Dust	19	
10 01 01	C&D Inert Mixed	4	
12 01 13	Solder Dross	19	
15 01 01	Cardboard & Paper Packaging	41	
15 01 02	Plastic Packaging	310	
15 01 03	Wooden Packaging		342
15 01 06	Mixed Packaging	194	
15 01 07	Glass Packaging	1,969	1966
15 02 03	Solder Tubes	1	
16 02 14	WEEE	1	
16 11 06	Kiln Ash	18	
17 09 04	Mixed C&D	757	58
19 08 05	Liquid Waste		1332.5
19 12 09	C&I Fines		18
19 12 12	Mixed Residual Waste from mechanical treatment		60,288
20 01 01	Paper & Cardboard	69	
20 01 02	Glass	374	60
20 01 08	Commercial Food Wastes	886	777
20 01 11	Textiles	1	
20 01 35*	WEEE	40	90
20 01 36	WEEE	129	
20 01 38	Wood from municipal sources	75	45
20 01 39	Plastic from municipal sources	69	
20 01 40	Metal from municipal sources	28	169
20 03 01	Mixed Residual Waste – green bin	1,131	
20 03 01	Mixed Residual Waste – black bin	50,836	
20 03 07	Bulky Waste	10,650	4,676
	Total Received	67,621	
	Total Consigned		69,848

Table 5.2 Waste Received & Consigned 2010

EWC	Description	Waste In	Waste Out
10 01 01	C&D Inert Mixed	6.00	
10 10 08	C&D Inert Mixed	48.00	
12 01 13	Solder Dross	10.00	
15 01 01	Cardboard & Paper Packaging	20.00	
15 01 02	Plastic Packaging	25.00	
15 01 03	Wooden Packaging	332.00	358.88
15 01 04	Metallic Packaging	0.30	
15 01 06	Mixed Packaging	366.00	92.24
15 01 07	Glass Packaging	1,615.00	2,108.39
15 02 03	Solder Tubes	1.00	
16 02 14	WEEE	1.00	
16 10 02	Liquid Waste		767.12
17 01 07	Mixture of concrete, bricks, tiles, ceramics from C&D Waste	580.00	30.28
17 04 01	Copper, brass, bronze from C&D Waste	1.00	
19 12 05	Glass	313.00	
19 12 07	Processed Wood	15.00	62.10
19 12 12	Mixed Residual Waste from mechanical treatment	22,153.00	65,357.62
19 13 02	C&D	15.00	
20 01 01	Paper & Cardboard	98.00	
20 01 02	Glass	289.00	28.20
20 01 08	Commercial Food Wastes	138.00	23.97
20 01 11	Textiles	23.00	17.84
20 01 35*	WEEE	18.00	89.00
20 01 36	WEEE	97.00	
20 01 38	Wood from municipal sources	141.00	115
20 01 39	Plastic from municipal sources	226.00	
20 01 40	Metal from municipal sources	27.00	143.00
20 03 01	Mixed Residual Waste	27,347.00	
20 03 07	Bulky Waste	14,347.00	793.93
	Total Received	68,252.30	
	Total Consigned		69,987.57
	Total Recovered		31,806.90
	Total Disposed		38,180.67
	Recovery Rate		45.45%

Table 5.3 Waste Received & Consigned

	2010	2009	2008	2007	2006	2005
Total Received	68,252.30	54,697.49	61,288.71	88,009.32	68,962.92	67,272.68
Total Consigned	69,987.57	46,393.84	61,879.66	89,229.89	68,664.82	66,486.44
Total Recovered	31,806.90	15,521.44	21,254.99	23,797.77	29,861.54	26,719.68
Total Disposed	38,180.67	40,872.40	40,721.72	65,432.12	38,803.28	39,766.76
Recovery Rate	45.45%	27.52%	34.29%	26.67%	44%	40%

6. ENVIRONMENTAL INCIDENTS AND COMPLAINTS

6.1 Incidents

There were no incidents during the reporting period.

6.2 Register of Complaints

Greenstar maintains a register of complaints received in accordance with Condition 10.4 of the waste licence. The complaints register includes the details of all complaints and the actions carried out in response to each complaint. Approximately fourth eight (48 No.) complaints were received during the reporting period in relation to odours at the facility. One (1 No.) complaint was received in relation to litter. A copy of the complaints register and responses is included in Appendix 1.

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 account 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.

The schedule of Objectives and Targets, including their status for 2011 (Table 7.1), as well as the proposed Objectives and Targets for 2012 (Table 7.2) are presented below. An index of procedures used at the facility is included in Appendix 2.

7.1.1 Site Management Structure

Details of the site management structure are given below.

Name: Louise Demir

Responsibility: Operations Manager.

Experience: 5 years waste management experience. FÁS course completed.

Name: Michael Hannon

Responsibility: Support Service Manager / Deputy Operations Manager.

Experience: 11 years waste management experience. FÁS course completed.

Name: Simon Kelly

Responsibility: GDA and BPS Engineering Manager.

Experience: Chartered Mechanical Engineer with 20 years post graduate experience including 8 years experience in waste management; has completed the FÁS waste management course.

7.1.2 Staff Training

Staff training carried out during the year included operational training. Environmental management system and environmental awareness training was carried out in 2010 and is included on the facility training matrix for 2013. Environmental training is carried out for any new staff employed at the facility as required.

7.2 Environmental Management Programme

7.2.1 Schedule of Objectives 2011

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

Objective 1 – Awareness and Training

Environmental awareness training was carried out in 2010. Further training is scheduled on the facility training matrix for 2013.

Objective 2 – Energy & Resource Consumption

Facility management continually assess the resource consumption at the facility.

Objective 3 – Review and Assess the effectiveness of Nuisance Control Procedures

All procedures were reviewed as part of the Integrated Management System. The facility did not create a nuisance in 2011.

Objective 4 – Pollution Prevention

The environmental monitoring programme has shown that the facility is not causing pollution in the local environment.

Objective 5 - Infrastructure

A civic amenity site was scheduled to be set up in 2011. The civic amenity is however subject to a Waste Licence Review which is currently with the Agency.

7.2.2 Schedule of Objectives 2012

A schedule of targets and objectives for 2012 has been set by the management of the facility. These objectives are outlined in Table 7.3.

7.3 Communications Programme

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 ensuring that the policy itself and records are available to the public and interested parties.

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

Records available for public inspection on site include:-

Environmental Policy,

Waste Licence,

Licence Application and Review documentation,

Monitoring Records,

Complaints File,

EPA Correspondence File.

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

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

The facility manager meets with any interested other occupants of the Industrial Estate and the representatives of the Glanmire Residence Association to discuss the environmental performance of the facility and address any environmental issues or concerns that may arise.

Table 7.2 Schedule of Objective and Targets 2011

No	2011 Objective	Target	Responsibility	Update
1	Awareness and Training	Continue to ensure that appropriate training is carried out specific to all site personnel as per the Company's established Training Matrix.	Site Management	Ongoing
2	Energy & Resource Consumption	Summarise energy and resource usage on a quarterly basis with a view to reducing consumption	Site Management	Ongoing
		Review and implement findings of Energy Audit		
		Upgrade on site generator to ESB substation		
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	Complete. Smoke test completed March 2011. BMS updated 1 st December 2011
		Complete MRF sealing project and associated smoke testing to assess integrity of MRF building		
		Upgrade BMS system to include monitoring of fast acting vehicle doors and pedestrian doors in the MRF.		
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. No exceedances of ELVs in 2011
		Continue to ensure the integrity and maintenance of all drainage infrastructure.		
5	Infrastructure	Set up and operation of a Civic Amenity Site	Site Management	Postponed until outcome of licence review application

Table 7.3 Schedule of Objective and Targets 2012

No	Objective	Target	Responsibility	Timescale
1	Awareness and Training	Continue to ensure that appropriate training is carried out specific to all site personnel as per the Company's established Training Matrix.	Site Management	Ongoing
2	Energy & Resource Consumption	Summarise energy and resource usage on a quarterly basis with a view to reducing consumption	Site Management	Ongoing
		Review and implement findings of Energy Audit	Site Management	Ongoing
		Upgrade on site generator to ESB substation	Site Management	Q42012
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.	Site Management	Ongoing
5	Infrastructure	Set up and operation of a Civic Amenity Site	Site Management	Q4 2012
		Installation of C&D Bay	Site management	Q1 2012
		Implement Traffic Management Plan including Pedestrian Walkways	Site management	Q2 2012

7.4 Report Financial Provision

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

7.5 Nuisance Controls

Greenstar has contracted a vermin control company Quality Pest to carry out nuisance control at the facility.

7.6 European Pollutant Release and Transfer Register

Under the European Pollutant Release and Transfer Register Regulation (EC) No. 166/2006 Greenstar are required to submit information annually to the Agency. A copy of the information submitted to the Agency via the web-based data reporting system is included in Appendix 3.

8. OTHER REPORTS

No other reports were requested or submitted to the Agency in 2011.

APPENDIX 1

Complaints Register



Doc. No: IF-07A Revision No.: 01 Issue Date: 05th July 2010

Approved By: Malcolm Dowling - Group Environmental Manager
Oliver Callan - Group H&S Manager

<i>Odour Management</i>	Facility Name:	Greenstar Recycling (Munster) Ltd
	Address:	Sarsfield Court, Glanmire, Co.Cork
	Licence No.:	W0136-02

Date Opened	Details of the Issue (Odour Characteristics, Weather Conditions etc)	Person Responsible (Facility Manager, Env Executive, Site Supervisor etc)	Plant Operating Synopsis	Details of Action Taken	Date Closed
06/01/2010	Odour complaint John Forde	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	07/01/2010
06/01/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	07/01/2010
09/04/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	09/04/2010
10/04/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	12/04/2010
12/04/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	12/04/2010
17/04/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	17/04/2010

Date Opened	Details of the Issue (Odour Characteristics, Weather Conditions etc)	Person Responsible (<i>Facility Manager, Env Executive, Site Supervisor etc</i>)	Plant Operating Synopsis	Details of Action Taken	Date Closed
17/05/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	17/05/2010
20/05/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	20/05/2010
29/05/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	29/05/2010
31/05/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	31/05/2010
31/05/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	31/05/2010
02/06/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	02/06/2010
02/06/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	02/06/2010
02/06/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	02/06/2010
03/06/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	03/06/2010

Date Opened	Details of the Issue (Odour Characteristics, Weather Conditions etc)	Person Responsible (<i>Facility Manager, Env Executive, Site Supervisor etc</i>)	Plant Operating Synopsis	Details of Action Taken	Date Closed
03/06/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	03/06/2010
08/06/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	08/06/2010
10/06/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	10/06/2010
12/08/2010	Odour complaint Mr Michael O Riordan via EPA	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was opened. Complainant was contacted and EF-10B(iii) was completed. All abatement measure found to be within spec. Complaint was unverified. Response issued to EPA	12/08/2010
26/08/2010	Odour complaint Mr John Forde via EPA	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was opened. All abatement measures found to be within spec. Complaint was unverified. Response issued to EPA	31/08/2010
31/08/2010	Odour complaint Mr John Forde via EPA	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was opened. All abatement measures found to be within spec. Complaint was unverified. Response issued to EPA	10/09/2010
31/08/2010	Odour complaint Mr John Forde via EPA	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was opened. All abatement measures found to be within spec. Complaint was unverified. Response issued to EPA	10/09/2010
06/09/2010	Odour complaint Mr John Forde via EPA	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was opened. All abatement measures found to be within spec. Complaint was unverified. Response issued to EPA	10/09/2010
06/09/2010	Odour complaint Mr Ray Foley via EPA	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was opened. All abatement measures found to be within spec. Complaint was unverified. Response issued to EPA	10/09/2010

Date Opened	Details of the Issue (Odour Characteristics, Weather Conditions etc)	Person Responsible (<i>Facility Manager, Env Executive, Site Supervisor etc</i>)	Plant Operating Synopsis	Details of Action Taken	Date Closed
01/10/2010	Odour complaint Mr John Forde 27/09/2010 via EPA	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was opened. All abatement measures found to be within spec. Complaint was unverified. Response issued to EPA	08/10/2010
01/10/2010	Odour complaint Mr John Forde 27/09/2010 via EPA	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was opened. All abatement measures found to be within spec. Complaint was unverified. Response issued to EPA	08/10/2010
14/10/2010	Odour complaint Mr Tom Ryan 08/10/2010 via EPA	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was opened. All abatement measures found to be within spec. Complaint was unverified. Response issued to EPA	26/10/2010
05/11/2010	Odoru complaint Mr John Forde 01/11/2011 vai EPA . Ref WO136-02/CC92SMcD	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	08/10/2010
19/01/2011	Odour complaint Mr John Forde 18/01/2011 via EPA . Ref WO136-02/CC95SMcD	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	24/01/2011
28/01/2011	Litter complaint via EPA from anomous complainant	Facility Manager	N/A	Road was inspected and litter picked. Response issued to the EPA. No evidence of a spill from a GS vechicle was detected	28/01/2011
31/01/2011	Odour complaint Mr John Forde 27/01/2011 via EPA . Ref WO136-02/CC98SMcD	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	03/02/2011
21/02/2011	Odour complaint Mr John Forde 17/02/2011 via EPA . Ref WO136-02/CC101SMcD	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	25/02/2011
21/02/2011	Odour complaint Mr John Forde 18/02/2011 via EPA . Ref WO136-02/CC100SMcD	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	25/02/2011

Date Opened	Details of the Issue (Odour Characteristics, Weather Conditions etc)	Person Responsible (<i>Facility Manager, Env Executive, Site Supervisor etc</i>)	Plant Operating Synopsis	Details of Action Taken	Date Closed
11/02/2011	Odour complaint Mr John Forde 09/02/2011 via EPA . Ref WO136-02/CC99SMcD	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	14/02/2011
07/04/2011	Odour complaint Mr John Forde 29/03/2011 via EPA . Ref WO136-02/CC102SMcD	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	13/04/2011
07/04/2011	Odour complaint Mr John Forde 04/04/2011 via EPA . Ref WO136-02/CC103SMcD	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	13/04/2011
07/04/2011	Odour complaint Mr Tom Ryan 28/03/2011 via EPA . Ref WO136-02/CC104SMcD	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	13/04/2011
25/04/2011	Odour complaint Mr John Forde 21/04/2011 via EPA . Ref WO136-02/CC105SMcD. Pertaining to alledged waste odours on the Thur 21/04, Saturday 16/04	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA. DL was not on site on 21/04 but MH was. MH visited JF premises but Mr Forde was not present. No odour was detected	25/04/2011
06/05/2011	Odour complaints via EPA . Ref WO136-02/CC106SMcD. Pertaining to the period 27/04/2011-03/05/2011.	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	17/05/2011
16/06/2011	Odour complaint Mr John Forde 14/06/2011 via EPA . Ref WO136-02/CC100. Telephone call recieved by LD from Peter Cunningham of the EPA at the time of the alledged complaint but was unverified ie no odour was detected	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Response issued to the EPA	20/06/2011
27/06/2011	Odour complaint Mr John Forde 24/06/2011 via EPA . Ref WO136-02/CC107ml. Complaint in relation to 24/06 between 10:00am and 12:00pm/ Odour complaint taken by the EPA at 2:15pm and relayed by phone to MH at 14:20pm	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Written response issued to the EPA. Significant delay between notification of said complaint and alledged complaint	29/06/2011
07/07/2011	Odour complaint Mr John Forde 04/07/2011 via EPA . Ref WO130-02/CC108SMcD. Complaint was in relation to the 04/07 between 15:00 and 16:00. Complaint was taken by the EPA at 16:00.	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Written response issued to the EPA. Significant delay between notification of said complaint and alledged complaint	13/07/2011

Date Opened	Details of the Issue (Odour Characteristics, Weather Conditions etc)	Person Responsible (<i>Facility Manager, Env Executive, Site Supervisor etc</i>)	Plant Operating Synopsis	Details of Action Taken	Date Closed
29/07/2011	Odour complaint Mr John Forde 27/07/2011 via EPA . Ref WO130-02/CC109SMcD. Complaint was in relation to the 30/09 at 8:15am. Complaint was taken by the EPA at 11:40am	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Written response issued to the EPA. Significant delay between notification of said complaint and alledged complaint	14/02/2011
06/09/2011	Odour complaint Mr John Forde 30/08 via EPA .Recieved by post 02/09/2011. Ref WO130-02/CC110. Complaint was in relation to Tuesday 30/09 between 14:30and 15:15. Complaint was made at 15:30 to the FPA	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Written response issued to the EPA. Significant delay between notification of said complaint and alledged complaint	09/09/2011
22/09/2011	Odour complaint Mr John Forde 14/09/2011 via EPA .Recieved by post 22/09/2011. Ref WO130-02/CC111. Complaint was in relation to Friday 09/09 and Saturday 10/09	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Written response issued to the EPA. Significant delay between notification of said complaint and alledged complaint	26/09/2011
28/09/2011	Odour complaint Mr John Forde 26/09/2011 via EPA .Recieved by post 28/09/2011. Ref WO130-02/CC112. Complaint was in relation to the Friday 23/09 16:00-18:00 and Saturday 24/09 08:30-14:00	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Written response issued to the EPA. Significant delay between notification of said complaint and alledged complaint	04/10/2011
05/10/2011	Odour complaint Mr John Forde 29/09/2011 via EPA .Recieved by post 04/10/2011. Ref WO130-02/CC113. Complaint ws in realltion to Thursday the 29th of September. EPA Inspector was out of office and did not receive the complaint until the 03rd	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Written response issued to the EPA. Significant delay between notification of said complaint and alledged complaint	08/10/2011
10/11/2011	Odour complaint Mr John Forde 10/11/2011 via EPA .Recieved by post 16/11/2011. Ref WO130-02/CC114. Complaint ws in realltion to Friday 10/11/2011, Friday 04/11/2011 and Saturday 05/11/2011.	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Written response issued to the EPA. Significant delay between notification of said complaint and alledged complaint	17/11/2011
15/11/2011	Odour complaint Mr John Forde 15/11/2011 via telephone EPA .Recieved by post 18/11/2011. Ref WO130-02/CC115CN. Complaint was in realltion to Tuesday 15/11/2011.	Facility Manager	Plant was operating within specified parameters. No odours were detected during routine odour patrols which are completed 3 times daily. An additional patrol in response to the complaint was completed with no odours detected.	Investigation was initiated. All abatement measures found to be within spec. Complaint was unverified. Written response issued to the EPA.	19/11/2011

APPENDIX 2

Procedures List



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

Integrated Procedures - IP

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

Safety Procedures - SP

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



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Approved By:	Malcolm Dowling – <i>Group Environmental Manager</i> Oliver Callan – <i>Group H&S Manager</i>	Page 2 of 4

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



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

Amendment History

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

APPENDIX 3

European Pollutant Release and Transfer Register



[Guidance to completing the PRTR workbook](#)

AER Returns Workbook

Version 1.1.13

REFERENCE YEAR	2011
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1. FACILITY IDENTIFICATION

Parent Company Name	Greenstar Recycling (Munster) Limited
Facility Name	Greenstar Recycling (Munster) Limited
PRTR Identification Number	W0136
Licence Number	W0136-02

Waste or IPPC Classes of Activity

No.	class_name
4.2	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).
3.11	Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.12	Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.13	Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.
4.13	Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.
4.3	Recycling or reclamation of metals and metal compounds.
4.4	Recycling or reclamation of other inorganic materials.
Address 1	Sarsfieldcourt Industrial Estate
Address 2	Sarsfieldcourt
Address 3	Glanmire
Address 4	Cork
	Cork
Country	Ireland
Coordinates of Location	-8.40596 51.9631
River Basin District	IESW
NACE Code	3832
Main Economic Activity	Recovery of sorted materials
AER Returns Contact Name	Suzanne Byrne
AER Returns Contact Email Address	suzanne.byrne@greenstar.ie
AER Returns Contact Position	Environmental Executive
AER Returns Contact Telephone Number	01-2947949
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	01-2947900
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	0
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

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

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

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

4.1 RELEASES TO AIR

[Link to previous years emissions data](#)

| PRTR# : W0136 | Facility Name : Greenstar Recycling (Munster) Limited | Filename : W0136_2011.xls | Return Year : 2011 |

30/03/2012 12:19

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

POLLUTANT		METHOD			Please enter all quantities in this section in KGs			
Name		M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
No. Annex II						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			Please enter all quantities in this section in KGs			
Name		M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
No. Annex II						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			Please enter all quantities in this section in KGs			
Name		M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
Pollutant No.						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:

Please enter summary data on the quantities of methane flared and / or utilised		Greenstar Recycling (Munster) Limited			
		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

[Link to previous years emissions data](#)

| PRTR# : W0136 | Facility Name : Greenstar Recycling (Munster) Limited | Filename : W0136_2011.xls | Return Year : 2011 |

30/03/2012 12:26

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 or

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT		M/C/E	Method Used		QUANTITY			
No. Annex II	Name		Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

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

SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT		M/C/E	Method Used		QUANTITY			
No. Annex II	Name		Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

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

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

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT		M/C/E	Method Used		QUANTITY			
Pollutant No.	Name		Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

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

4.3 RELEASES TO WASTEWATER OR SEWER

[Link to previous years emissions data](#)

| PRTR# : W0136 | Facility Name : Greenstar Recycling (Munster) Limited | Filename : W0136_2011

30/03/2012 12:26

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
			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					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				
					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

4.4 RELEASES TO LAND

[Link to previous years emissions data](#)

| PRTR# : W0136 | Facility Name : Greenstar Recycling (Munster) Limited | Filename : W0136_2011.xls | Return Year : 2011 |

30/03/2012 12:27

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 Code	Method Used 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					Please enter all quantities in this section in KGs		
POLLUTANT		METHOD			QUANTITY		
Pollutant No.	Name	M/C/E	Method Code	Method Used 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

(PRT09_V0136) Facility Name: Greentair Recycling (Munster) Limited (Eiranne: W0136_2011.xls) Return Year: 2011

30/03/2012 12:27

Please enter all quantities in this sheet in Tonnes

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Licence/Permit No. of Heat Recovery Facility Name and Location/Permit No. of Recover/Disposer	Name and Address of Heat Recovery Facility Name and 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 Recoverer / Disposal Site (HAZARDOUS WASTE ONLY)
						MCE	Method Used					
Within the Country	06 13 99	No	27.0	wastes not otherwise specified	D1	M	Weighted	Offsite in Ireland	Greentair Holdings Ltd, W0146-02	Knockshaney, Navan, Co. Meath, Ireland		
Within the Country	15 01 03	No	12.0	wooden packaging	R3	M	Weighted	Offsite in Ireland	ERAS ECO (AVR) Environmental Solutions, W0211-01	Foohle, Youghal, Co. Cork, Ireland		
Within the Country	15 01 03	No	330.0	wooden packaging	R3	M	Weighted	Offsite in Ireland	Glyntown Enterprises (Greentair Ltd, WFP-CK-10-0047-02	Sarsfield Court, Glanmire, Co. Cork, Ireland		
Within the Country	15 01 07	No	1966.0	glass packaging	R13	M	Weighted	Offsite in Ireland	Glyntown Enterprises (Greentair Ltd, WFP-CK-10-0047-02	Sarsfield Court, Glanmire, Co. Cork, Ireland		
Within the Country	19 08 05	No	585.78	sludges from treatment of urban waste water	R13	M	Weighted	Offsite in Ireland	Lahane Environmental to Leixlip WWTP, D0004-01	Co. Kildare, Ireland		
Within the Country	19 08 05	No	355.0	sludges from treatment of urban waste water	R13	M	Weighted	Offsite in Ireland	Limerick Main Drainage, D0013-01	Dock Road, Limerick, Ireland		
Within the Country	19 08 05	No	351.72	sludges from treatment of urban waste water mixed construction and demolition waste other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	R13	M	Weighted	Offsite in Ireland	AGS Environmental Solutions to Tralee WWTP, D0040-01	...Tralee, Co. Kerry, Ireland		
Within the Country	17 09 04	No	58.0	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	R13	M	Weighted	Offsite in Ireland	Milow Contracts, CR(N)Z775	...Mounsbury Co. Cork, Ireland		
Within the Country	19 12 09	No	18.0	minerals (for example sand, stones) other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R13	M	Weighted	Offsite in Ireland	Greentair Holdings Ltd, W0183-01	Ballycoolin, Dublin 11, Dublin 11, Ireland		
Within the Country	19 12 12	No	7944.11	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R13	M	Weighted	Offsite in Ireland	McGill Environmental Services, WFP-CK-09-011-02	Ballywoher, Castlebar, Co. Wick, Ireland		
Within the Country	19 12 12	No	21.0	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R13	M	Weighted	Offsite in Ireland	MRF Millennium Park, W0183-01	Ballycoolin, Finglas, Dublin 11, Ballycoolin, Dublin 11, Ireland		
Within the Country	19 12 12	No	21.0	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R13	M	Weighted	Offsite in Ireland	MRF Greentair Bray, W0053-03	...Fassane, Bray, Co. Wicklow, Ireland		
Within the Country	19 12 12	No	236.12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D1	M	Weighted	Offsite in Ireland	KTK Landfill, W0081-04	Brownstown, Kilsheen, Co. Kildare, Ireland		
Within the Country	19 12 12	No	380.11	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R13	M	Weighted	Offsite in Ireland	Greentair Materials Recovery Ltd, W0188-01	Greenogue, Rathcoole, Co. Dublin, Ireland		
Within the Country	19 12 12	No	42.0	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R13	M	Weighted	Offsite in Ireland	Greentair Holdings Ltd, W0183-01	Millennium Park Ltd Ballycoolin, Dublin 11, Dublin 11, Ireland		
Within the Country	19 12 12	No	12628.0	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R13	M	Weighted	Offsite in Ireland	MRF Greentair Bray, W0053-03	...Fassane, Bray, Co. Wicklow, Ireland		
Within the Country	19 12 12	No	16164.0	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D1	M	Weighted	Offsite in Ireland	Greentair Ltd, W0146-01	Knockshaney Landfill, Navan, Co. Meath, Ireland		
Within the Country	19 12 12	No	66.28	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D1	M	Weighted	Offsite in Ireland	KTK Landfill, W0081-04	Brownstown, Kilsheen, Co. Kildare, Ireland		
Within the Country	19 12 12	No	10374.0	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D1	M	Weighted	Offsite in Ireland	Bord na Mona, Dohd Landfill, W0201-03	...Carbury, Co. Kildare, Ireland		
Within the Country	19 12 12	No	12412.0	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D1	M	Weighted	Offsite in Ireland	Youghal Landfill, Cork County Council, W0089-02	...Youghal, Co. Cork, Ireland		
Within the Country	20 01 02	No	60.0	glass	R13	M	Weighted	Offsite in Ireland	MRF Glyntown Enterprises, WFP-CK-10-0047-02	Sarsfield Court, Glanmire, Co. Cork, Ireland		
Within the Country	20 01 08	No	777.0	biodegradable kitchen and canteen waste discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components	R13	M	Weighted	Offsite in Ireland	Accom Recycling Ltd, W0249-01	...Lilleshall, Co. Tipperary, Ireland		
Within the Country	20 01 35	Yes	90.0	hazardous components	R13	M	Weighted	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	45.0	wood other than that mentioned in 20 01 37	R3	M	Weighted	Offsite in Ireland	CTO Environmental Solutions Ltd, Cork City Council, WFP-CK-09-018-02	...Rosellan, Co. Cork, Ireland		
Within the Country	20 01 40	No	27.0	metals	R4	M	Weighted	Offsite in Ireland	Hammond Lane Metal Co Ltd, WFP-CK-10-0077-02	...Ringside, Co. Cork, Ireland		
Within the Country	20 01 40	No	31.0	metals	R4	M	Weighted	Offsite in Ireland	Hill Cork OK(S)491.07, OK(S)491.07	...Dublin Hill, Cork, Co. Cork, Ireland		
Within the Country	20 01 40	No	88.0	metals	R4	M	Weighted	Offsite in Ireland	MRF Millennium Park, W0183-01	Ballycoolin, Finglas, Dublin 11, Ballycoolin, Dublin 11, Ireland		
Within the Country	20 01 40	No	23.0	metals	R4	M	Weighted	Offsite in Ireland	MRF Greentair Bray, W0053-03	...Fassane, Bray, Co. Wicklow, Ireland		
Within the Country	20 03 07	No	65.0	bulky waste	R13	M	Weighted	Offsite in Ireland	Greentair Holdings Ltd, W0183-01	Millennium Park Ltd Ballycoolin, Dublin 11, Dublin 11, Ireland		
Within the Country	20 03 07	No	65.0	bulky waste	R13	M	Weighted	Offsite in Ireland	MRF Greentair Bray, W0053-03	...Fassane, Bray, Co. Wicklow, Ireland		
Within the Country	20 03 07	No	3306.0	bulky waste	D1	M	Weighted	Offsite in Ireland	KTK Landfill, W0081-04	Brownstown, Kilsheen, Co. Kildare, Ireland		
Within the Country	20 03 07	No	23.0	bulky waste	R13	M	Weighted	Offsite in Ireland	Kilaney Waste Disposal, W0217-01	...Kilaney, Co. Kerry, Ireland		
Within the Country	20 03 07	No	1217.0	bulky waste	R13	M	Weighted	Offsite in Ireland	Country Clean Ltd, WMP0207	Churchfield, Connolly Rd, Cork, Co. Cork, Ireland		

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

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