

ANNUAL ENVIRONMENTAL REPORT
FOR GREENSTAR LTD.
SARFIELD COURT, CORK
LICENCE NO. W0136-02
JANUARY 2010 – DECEMBER 2010

Prepared For: -

Greenstar Ltd.,
Unit 6,
Ballyogan Business Park,
Ballyogan Road,
Sandyford,
Dublin 18.

Prepared By: -

O' Callaghan Moran & Associates,
Granary House,
Rutland Street,
Cork.

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Report No	Date	Status	Prepared By	Reviewed By
0481305	24/03/2011	Draft	Martina Gleeson PhD	Michael Watson MA.
0481305	31/03/2011	Final	Martina Gleeson PhD	Michael Watson MA.

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1. INTRODUCTION

This is the 2010 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 2010 to the 31st December 2010. 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.

¹ EPA (Environmental Protection Agency) 1999 Waste Licensing – Draft Guidance on Environmental Management Systems and Reporting to the Agency

2. SITE DESCRIPTION

2.1 Site Location and Layout

The facility is 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 was as specified in Schedule D of the Waste Licence and 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 are set in Schedule C3 and Condition 6.4 of the licence and 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 2010 were low and were below those detected by the Agency in 2006. High levels of 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 2010: SW-1

Parameter	Units	Q1	Q2	Q3	Q4
pH	pH units	7.91	8.27	8.48	7.37
Conductivity	mS/cm	0.253	0.348	0.279	0.268
Temperature	°C	5	9.1	14.1	10.2
BOD	mg/l	<1	<1	<1	<1
COD	mg/l	<7	<7	<7	13
Ammoniacal Nitrogen	mg/l	0.5	0.03	0.06	0.05
Dissolved Oxygen	mg/l	10	9	9	9
TOC	mg/l	2	3	7	13
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	24.4	9	30.4	14.3
Nitrite as NO ₂	mg/l	0.06	0.06	0.03	<0.02
Mineral Oils	mg/l	<0.01	<0.01	<0.01	<0.01
Total Coliforms	cfu/100ml	1300	6950	2420	8080
Faecal Coliforms	cfu/100ml	921	816	299	250

Table 3.2 Surface water Monitoring Results 2010: SW-2

Parameter	Units	Q1	Q2	Q3	Q4
pH	pH units	8.13	8.27	8.4	6.98
Conductivity	mS/cm	0.243	0.33	0.264	0.218
Temperature	°C	5.3	9.1	14.6	9.8
BOD	mg/l	<1	<1	<1	<1
COD	mg/l	<7	<7	<7	27
Ammoniacal Nitrogen	mg/l	0.04	0.06	0.14	0.05
Dissolved Oxygen	mg/l	11	10	9	10
TOC	mg/l	<2	2	6	19
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	29.2	16.4	33.4	14.3
Nitrite as NO ₂	mg/l	0.07	0.04	<0.02	<0.02
Mineral Oils	mg/l	<0.01	<0.01	<0.01	<0.01
Total Coliforms	cfu/100ml	770	2380	3790	5540
Faecal Coliforms	cfu/100ml	46	167	1120	250

Table 3.3 Surface water Monitoring Results 2010: SW-3

Parameter	Units	Q1	Q2	Q3	Q4	Trigger Levels	Emission Limit
pH	pH units	7.98	8.52	8.69	7.6	N/A	N/A
Conductivity	mS/cm	0.435	0.531	0.448	0.27	N/A	N/A
Temperature	°C	6.2	9.9	15.4	12.1	N/A	N/A
BOD	mg/l	7	<1	<1	2	25	N/A
COD	mg/l	23	<7	<7	9	N/A	N/A
Ammoniacal Nitrogen	mg/l	0.05	0.37	1.88	0.05	N/A	N/A
Dissolved Oxygen	mg/l	7	6	6	5	N/A	N/A
TOC	mg/l	3	<2	7	10	35	N/A
TSS	mg/l	<10	<10	18	<10	N/A	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	4.1	11	25.6	3.7	N/A	N/A
Nitrite as NO ₂	mg/l	7.92	0.51	0.33	0.1	N/A	N/A
Mineral Oils	mg/l	<0.01	<0.01	<0.01	<0.01	N/A	5
Total Coliforms	cfu/100ml	173290	20980	7800	816400	N/A	N/A
Faecal Coliforms	cfu/100ml	16790	206	1553	3640	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 2010. 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 was as specified in Schedule D of the Waste Licence and 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 2010: W-1

Parameter	Units	Q2	Q4	IGV
pH	pH units	7.76	6.61	6.5-9.5
Conductivity	mS/cm	0.229	0.188	1
Temperature	°C	11.1	12.3	-
TOC	mg/l	<2	3	NAC
Ammoniacal Nitrogen	mg/l	0.04	<0.03	0.12
TSS	mg/l	257	1175	N/A
Nitrate as NO ₃	mg/l	14.2	14.4	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 2010: W-2

Parameter	Units	Q2	Q4	IGV
pH	pH units	7.14	7.1	6.5-9.5
Conductivity	mS/cm	0.201	0.369	1
Temperature	°C	11.5	11.3	-
TOC	mg/l	13	6	NAC
Ammoniacal Nitrogen	mg/l	0.04	0.05	0.12
TSS	mg/l	8,819	29736	N/A
Nitrate as NO ₃	mg/l	3.7	13.6	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 2010 was 767.12 tonnes and is shown on Table 5.1 (under EWC code 16 10 02).

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 2010

Parameter	Units	Q1	Q3
Temperature	°C	5.5	15.1
pH	pH units	7.59	7.99
Conductivity	mS/cm	0.375	0.989
BOD	mg/l	28	134.5
COD	mg/l	74	399
Ammoniacal Nitrogen	mg/l	0.82	26.18
TSS	mg/l	14	107
Mineral Oils	mg/l	0.213	<0.01

3.4 Noise Survey

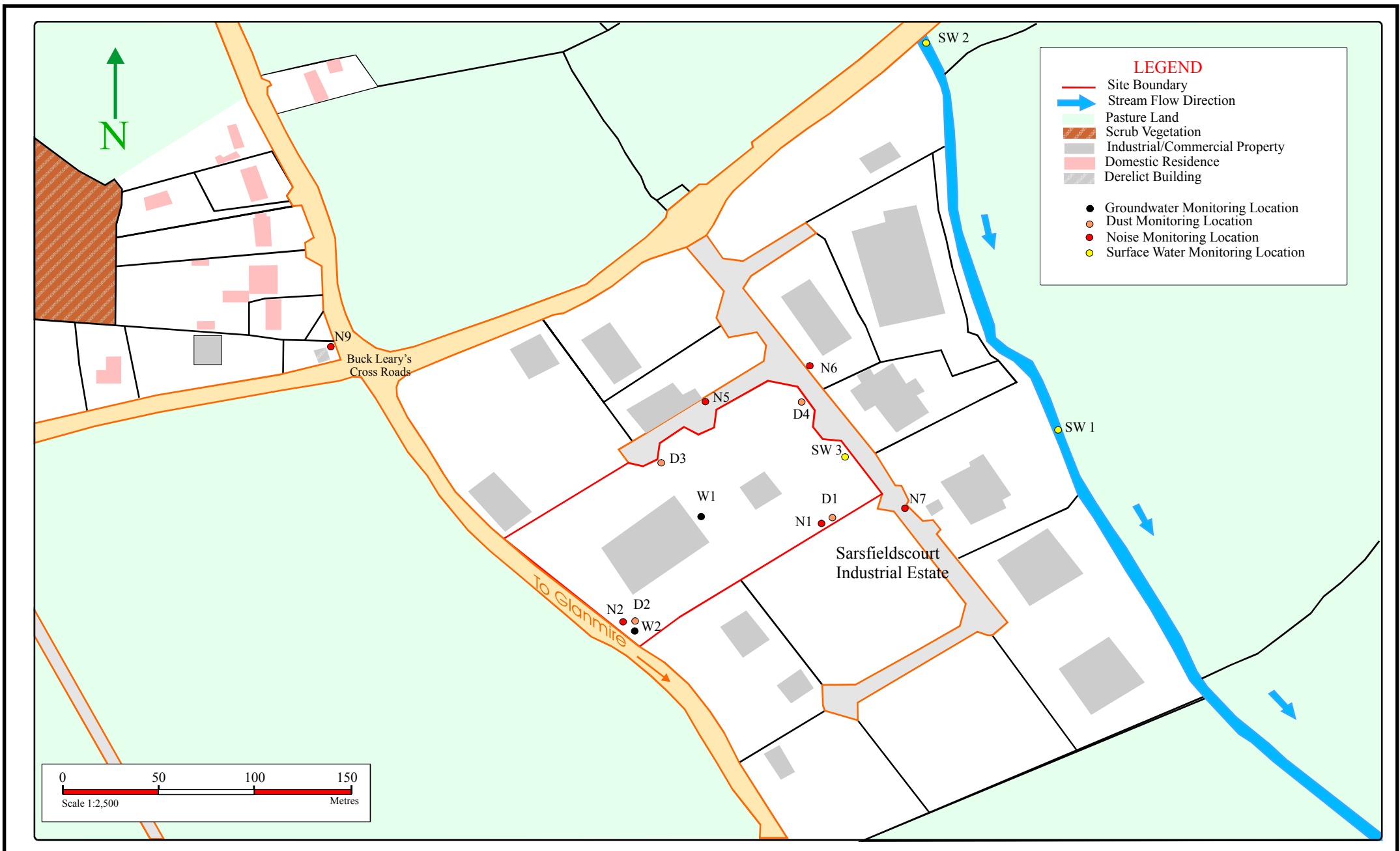
Schedules C and D of the Licence and Condition 6.7 require that a noise survey is carried out annually at the facility. This was conducted in August 2010. Monitoring was carried out at five noise monitoring locations, N-1, N-2, N-5, N-6 and N-7 specified in the licence and one off-site noise sensitive 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 2010

Station	Time	L _{Aeq} 30 min dB	L _A F10 30 min dB	L _A F90 30 min dB	Specific level* dB	Noise audible
N1	1158-1228	64	65	52	64	Occasional truck movements though entrance and around yards dominant when present. No other emissions audible apart from odour management system audible at low level. Traffic on industrial estate roadway outside entrance audible. Road traffic to W also audible. Various sources audible across industrial estate. Aircraft.
N2	1201-1231	69	71	64	69	Generator continuously audible and dominant. Power washing activity in yard SW corner also significant. Occasional truck and plant movements around yard audible.
N5	0834-0904	51	52	44	44-47	No emissions audible from Greenstar apart from sporadic truck movements in yards, and reversing alarm on mobile plant. Frequent noise audible from traffic movements on public roads to N & W, and through industrial estate. Occasional sources also audible at facilities throughout industrial estate. Birdsong & aircraft.
N6	0925-0955	54	56	44	44-49	No emissions audible from Greenstar facility apart from sporadic truck movements through entrance and in yard. Offsite, equipment in use within nearby building continuously audible. Truck movements through industrial estate, and particularly at nearby truck depot, significant. Road traffic audible to N. Birdsong & aircraft.
N7	0909-0939	62	62	48	48-53	No emissions audible from Greenstar facility apart from sporadic truck movements through entrance and in yard. Offsite, noise emissions audible from various premises. Intermittent vehicle movements through industrial estate roadway significant when present. Birdsong & aircraft.
N9	1117-1147	66	69	40	<31	No emissions audible from Greenstar facility. Frequent traffic through nearby road junction dominant. Truck movements audible at nearest commercial premises. Birdsong and aircraft.

*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.



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

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

Schedule D of the licence specifies that Greenstar must conduct dust monitoring on three occasions annually. This was undertaken during May, June and July 2010 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 2010.

Table 3.8 Dust Monitoring Results 2010

	May '10 mg/m ² /day	June '10 mg/m ² /day	July '10 mg/m ² /day	Deposition Limit mg/m ² /day
D-1	202.1	162.2	30.4	350
D-2	36.7	88.7	70.6	350
D-3	58.0	80.4	94.1	350
D-4	150.4	95.5	30.4	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 2010.

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 Environmental Management System (EMS) 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 2010 and those proposed for 2011.

Table 4.1 Site Infrastructural Works Carried Out in 2010

Description of Works	Scheduled Date of Completion	Completion Date
Replace trommel	Q2 2010	Q2 2010
Replace associated conveyors	Q2 - Q3 2010	Q2 2010
Installation of tipping wall in tunnel	Q2 - Q3 2010	Q2 2010
Upgrade wheel wash	Q2 - Q3 2010	Q2 2010
Relay floor in MRF building	Q2 - Q3 2010	Q2 2010

Table 4.2 Site Infrastructural Works Proposed for 2011

Description of Works	Proposed Date of Completion
MRF Sealing Project (Odour Control)	Q1 2011
Upgrade of Business Management System (BMS) configuration	Q2 2011
Addition of fast acting doors and pedestrian doors to BMS system	Q2 2011
Upgrade to ESB substation	Q4 2011
Set up of Civic Amenity Site	Q4 2011

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 Estimate of Resources Used On-Site in 2010

Resources	Quantities
Road Diesel	582,478 litres
Gas Oil	133,346 litres
Gear Oil	20 litres
Ad Blue	6,010 litres
Hydraulic, Transmission, Engine Oil	66 litres
Anti Freeze	20 litres
Truck Wash Detergent	50 litres
Electricity	185,400 units
Carbon	28,000 kg

4.3 Bund Integrity Test

Condition 3.10.5 instructs that bund testing is to be 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 2010. For comparative purposes the amounts of waste received and consigned in 2009 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.

The total amount received in 2010 was 68,286.44 tonnes. The total amount consigned was 69,957.81 tonnes. The difference consists of waste which remained on site at the end of 2009 and was consigned in 2010 and 767.12 tonnes of waste was generated (liquid waste) onsite in 2010. The recovery rate is estimated at 45.46 % which is much higher the previous year's recovery rate (27.52%). The main reason for this increase in recovery rate is the 104% increase in the amount of mechanically treated waste (19 12 12) being sent for recovery in 2010 (27,762 tonnes) versus 2009 (12,227 tonnes). 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 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 5.2 Waste Received & Consigned 2009

EWC	Description	Waste In	Waste Out
15 01 01	Cardboard Packaging	144.03	
15 01 02	Plastic Bottles		11.28
	Plastic Packaging	46.69	48.92
15 01 03	Pallets	9.92	162.62
	Wood	0.50	
	Wooden Packaging	212.50	3.96
15 01 06	Mixed Packaging	373.34	69.90
15 01 07	Glass Packaging	169.66	1,794.50
16 02 14	PC Complete Base Units	0.37	
16 10 02	Liq Waste		548.88
17 01 07	C&D Inert Mixed	455.66	37.72
17 05 04	C&D Inert Mixed	61.94	
19 05 01	LDF Non Composted Fraction	170.39	
19 09 02	Sludge	5.64	21.04
19 09 04	LDF Activated Carbon		27.28
19 12 07	Pallets		92.20
	Wood	0.36	87.38
19 12 12	C&I Dry Mixed	7,825.30	33,002.30
	MSW Municipal Mixed	4,830.08	12,625.20
	Fines MSW		7,446.00
	LDF Activated Carbon		25.46
20 01 01	Cardboard & Paper	12.86	
	Newsprint	0.35	
	Recy Paper	1.41	
20 01 02	Glass	1,615.05	55.86
20 01 08	Kitchen and Canteen Waste	87.22	
20 01 35*	Rec Electronics & Electrics	1.22	17.12
20 01 36	Rec Electronics & Electrics	19.37	
20 01 38	Wood	222.90	98.48
20 01 39	Plastic	98.69	
20 01 40	Metal	50.75	217.17
20 03 01	MSW Municipal Mixed	22,808.37	
20 03 07	C&I Dry Mixed	15,472.35	
	Total Received	54,697.49	
	Total Consigned		56,393.84
	Total Recovered		15,521.44
	Total Disposed		40,872.40
	Recovery Rate		27.52%

Table 5.3 Waste Received & Consigned

	2009	2008	2007	2006	2005
Total Received	54,697.49	61,288.71	88,009.32	68,962.92	67,272.68
Total Consigned	46,393.84	61,879.66	89,229.89	68,664.82	66,486.44
Total Recovered	15,521.44	21,254.99	23,797.77	29,861.54	26,719.68
Total Disposed	40,872.40	40,721.72	65,432.12	38,803.28	39,766.76
Recovery Rate	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. Twenty seven complaints were received during the reporting period in relation to odours at the facility. One complaint was received in relation to litter from a Greenstar vehicle. A copy of the complaints register is included in Appendix 1.

7. ENVIRONMENTAL DEVELOPMENT

7.1 Environmental Management Programme Report

Greenstar operates under a comprehensive Environmental Management System (EMS) which has been certified to ISO 14001 since 2007. In 2010 the facility was certified to OHSAS 18001. The facility is externally audited once per year and internally audited twice per year. The management programme is encompassed in the EMS for the facility and contains a schedule for achieving objectives and targets and designates responsibility and timeframes for achieving those targets.

The EMS is reviewed annually as part of the annual management review meeting during which senior management attend. The schedule of Objectives and Targets, including their status for 2010 (Table 7.1), as well as the proposed Objectives and Targets for 2011 (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: 4 years waste management experience. FÁS course completed.

Name: Michael Hannon

Responsibility: Support Service Manager / Deputy Operations Manager.

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

Name: Aidan Shanahan

Responsibility: Head of MRF Operations GDA and Munster.

Experience: 8 years waste management experience, 19 years operations management experience. FÁS course completed.

7.1.2 *Staff Training*

Staff training carried out during the year included environmental management system/ environmental awareness training, harness fall protection training, loading shovel training and forklift refresher training.

7.2 **Environmental Management Programme**

7.2.1 *Schedule of Objectives 2010*

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. Training was also carried out as necessary throughout the year.

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 2010.

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 new concrete surface was installed in the Materials Recovery Building.

Objective 6 – Equipment upgrade

A new trommel was installed as part of the upgrade works.

7.2.2 *Schedule of Objectives 2011*

A schedule of targets and objectives for 2011 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 2010

No	2010 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. Spill training Completed
		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	In place, due for review post MRF sealing.
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	Infrastructure	Install new concrete to the surface of the Materials Recovery Building.	Site Management	Completed Q2 2010
6	Equipment upgrade	New trommel to be installed as part of upgrade works and achievement of Landfill Biodiversion targets.	Site Management	Completed Q2 2010

Table 7.3 Schedule of Objective and Targets 2011

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	Q4 2011
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
		Complete MRF sealing project and associated smoke testing to assess integrity of MRF building	Site Management	Q2 2011
		Upgrade BMS system to include monitoring of fast acting vehicle doors and pedestrian doors in the MRF.	Site Management	Q2 2011
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 2011

7.4 Report Financial Provision

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

7.5 Nuisance Controls

Greenstar has contracted a vermin control company 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

A Licence Review application was submitted to the Agency in July 2010.

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

Interested Party Complaints Facility Name: Greenstar Recycling (Munster) Ltd
Address: Sarsfield Court, Glanmire, Co.Cork
Licence No.: W0136-02

Date Opened	Details of the Issue	Person Responsible (Facility Manager, Env Executive, Site Supervisor etc)	Corrective Action	Preventive Action (As appropriate)	Date Closed
26/01/2010	Litter complaint via EPA relating to a GS vehicle				



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

Odour Management	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	Investigation was opened. All abatement measures found to be within spec.Complaint was unverified.	07/01/2010
06/01/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters	Investigation was opened. All abatement measures found to be within spec.Complaint was unverified.	07/01/2010
09/04/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters	Investigation was opened. All abatement measures found to be within spec.Complaint was unverified.	09/04/2010
10/04/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters	Investigation was opened. All abatement measures found to be within spec.Complaint was unverified.	12/04/2010
12/04/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters	Investigation was opened. All abatement measures found to be within spec.Complaint was unverified.	12/04/2010
17/04/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters	Investigation was opened. All abatement measures found to be within spec.Complaint was unverified.	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	Investigation was opened. All abatement measures found to be within spec.Complaint was unverified.	17/05/2010
20/05/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters	Investigation was opened. All abatement measures found to be within spec.Complaint was unverified.	20/05/2010
29/05/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters	Investigation was opened. All abatement measures found to be within spec.Complaint was unverified.	29/05/2010
31/05/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters	Investigation was opened. All abatement measures found to be within spec.Complaint was unverified.	31/05/2010
31/05/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters	Investigation was opened. All abatement measures found to be within spec.Complaint was unverified.	31/05/2010
02/06/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters	Investigation was opened. All abatement measures found to be within spec.Complaint was unverified.	02/06/2010
02/06/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters	Investigation was opened. All abatement measures found to be within spec.Complaint was unverified.	02/06/2010
02/06/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters	Investigation was opened. All abatement measures found to be within spec.Complaint was unverified.	02/06/2010

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
03/06/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters	Investigation was opened. All abatement measures found to be within spec.Complaint was unverified.	03/06/2010
03/06/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters	Investigation was opened. All abatement measures found to be within spec.Complaint was unverified.	03/06/2010
08/06/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters	Investigation was opened. All abatement measures found to be within spec.Complaint was unverified.	08/06/2010
10/06/2010	Odour complaint John Forde to site	Facility Manager	Plant was operating within specified parameters	Investigation was opened. All abatement measures found to be within spec.Complaint was unverified.	10/06/2010
12/08/2010	Odour complaint Mr Michael O Riordan via EPA	Facility Manager	Plant was not operational at time of complaint to the agency. System checks pre and post complaint were as expected with all being within specified parameters	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	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	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	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 (Facility Manager, Env Executive, Site Supervisor etc)	Plant Operating Synopsis	Details of Action Taken	Date Closed
06/09/2010	Odour complaint Mr John Forde via EPA	Facility Manager	Plant was operating within specified parameters	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	Investigation was opened. All abatement measures found to be within spec.Complaint was unverified.Response issued to EPA	10/09/2010
01/10/2010	Odour complaint Mr John Forde 27/09/2010 via EPA	Facility Manager	Plant was operating within specified parameters	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	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	Investigation was opened. All abatement measures found to be within spec.Complaint was unverified.Response issued to EPA	26/10/2010

APPENDIX 2

Procedures List



Doc. No.: Control	Revision No.: As Shown	Issue Date: As Shown
Approved By:	Malcolm Dowling – Group Environmental Manager	Page 1 of 2
	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 04, 28/04/10
IP-08	Monitoring, Measurement & Improvement Procedure	Rev 02, 05/02/10
IP-09	Evaluation of Compliance Procedure	Rev 03, 10/03/10
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 02, 05/02/10
EP-02	Decommissioning and Aftercare Procedure	Rev 02, 05/02/10
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

APPENDIX 3

European Pollutant Release and Transfer Register



| PRTR# : W0136 | Facility Name : Greenstar Recycling (Munster) Ltd | Filename : W0136_2010.xls | Return Year : 2010 |

[Guidance to completing the PRTR workbook](#)

AER Returns Workbook

Version 1.1.11

REFERENCE YEAR	2010
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1. FACILITY IDENTIFICATION

Parent Company Name	Greenstar Recycling (Munster) Limited
Facility Name	Greenstar Recycling (Munster) Ltd
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
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?	
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) Ltd | Filename : W0136_2010.xls | Return Year : 2010 |

31/03/2011 12:31

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

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

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

Additional Data Requested from Landfill operators

For the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide summary data on landfill gas (Methane) flared or utilised on their facilities to accompany the figures for total methane generated. Operators should only report their Net methane (CH4) emission to the environment under T(total) KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:

Landfill:

Greenstar Recycling (Munster) Ltd

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

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

4.2 RELEASES TO WATERS

[Link to previous years emissions data](#)

| PRTR# : W0136 | Facility Name : Greenstar Recycling (Munster) Ltd | Filename : W0136_2010.xls | Return Year : 2010 |

31/03/2011 12:33

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 t

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) Ltd | Filename : W0136_2010.xls

31/03/2011 12:33

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) Ltd | Filename : W0136_2010.xls | Return Year : 2010 |

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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	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	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# : W0136 | Facility Name : Greenstar Recycling (Munster) Ltd | Filename : W0136_2010.xls | Return Year : 2010 |

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Please enter all quantities on this sheet in Tonnes

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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	Non-Haz Waste : Name and Licence/Permit No of Recoverer/Disposer	Haz Waste : Address of Next Destination Facility	Non-Haz Waste : Address of Recoverer/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used							
Within the Country	15 01 03	No	5.62	wooden packaging	R3	M	Weighed	Offsite in Ireland	G Keohane Recycling Ltd.,WCP-CK-08-0570-01		Glen Lane,Old Whitechurch Road,Cork,,Ireland			
Within the Country	15 01 03	No	306.38	wooden packaging	R13	M	Weighed	Offsite in Ireland	Glyntown Enterprises Ltd,WFP-CK-10-0047-02		Sarsfieldcourt Industrial Estate,Glanmire,Co. Cork,,Ireland			
Within the Country	15 01 03	No	46.88	wooden packaging	R3	M	Weighed	Offsite in Ireland	Eras Eco Ltd.,W0211-01		Foxhole,Youghal,Co. Cork,,Ireland			
To Other Countries	15 01 06	No	92.24	mixed packaging	R5	M	Weighed	Abroad	Re-Gen Waste Ltd.,WML 22/25		Shepherds Drive Carnbane Industrial Estate,Newry,Co. Down,BT35 6JQ,United Kingdom			
Within the Country	15 01 07	No	2108.39	glass packaging	R13	M	Weighed	Offsite in Ireland	Glyntown Enterprises Ltd,WFP-CK-10-0047-02		Sarsfieldcourt Industrial Estate,Glanmire,Co. Cork,,Ireland			
Within the Country	19 12 07	No	13.3	wood other than that mentioned in 19 12 06 other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12	R3	M	Weighed	Offsite in Ireland	Cork County Council,W0068-03		Youghal Mudlands,Youghal ,Co. Cork,,Ireland			
Within the Country	19 12 12	No	14315.48	11 other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd.,W0146-02		Knockharley,Navan,Co. Meath,,Ireland			
Within the Country	19 12 12	No	2370.1	11 other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12	R13	M	Weighed	Offsite in Ireland	Greenstar Limited,W0053-03		Fassaroe,Bray,Co. Wicklow,,Ireland			
Within the Country	19 12 12	No	393.14	11 other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12	R13	M	Weighed	Offsite in Ireland	Greenstar Limited,W0183-01		Millennium Business Park,Grange,Ballycoolin,Dublin 11,Ireland			
Within the Country	19 12 12	No	23.0	11 other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12	D5	M	Weighed	Offsite in Ireland	Bord Na Mona PLC,W0201-03		Drehid Landfill,Drehid ,Co. Kildare,,Ireland			
Within the Country	19 12 12	No	23256.3	11 other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12	D5	M	Weighed	Offsite in Ireland	Cork County Council,W0068-03		Youghal Mudlands,Youghal ,Co. Cork,,Ireland			
Within the Country	19 12 12	No	2078.36	11 other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12	R13	M	Weighed	Offsite in Ireland	Greenstar Materials Recovery Limited,W0188-01		Industrial Estate,Rathcoole,Co. Dublin,Ireland			
Within the Country	19 12 12	No	1195.0	11 other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12	R3	M	Weighed	Offsite in Ireland	McGill Environmental Systems (Ireland) Ltd,W0180-01		Coom,Carrignavar/Glenville, Co. Cork,,Ireland			
Within the Country	19 12 12	No	395.24	11 other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12	R3	M	Weighed	Offsite in Ireland	Acorn Recycling Ltd,W0249-01		Ballybeg,Littleton,Co. Tipperary,,Ireland			
Within the Country	20 01 02	No	28.2	glass	R5	M	Weighed	Offsite in Ireland	Glassco Recycling,WP/247/2006		Park,Naas,Co. Kildare,,Ireland			
Within the Country	20 01 08	No	5.04	biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	Acorn Recycling Ltd,W0249-01		Ballybeg,Littleton,Co. Tipperary,,Ireland			
Within the Country	20 01 08	No	18.93	biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	Greenstar Environmental Services,W0173-01		Forge Hill,Kinsale Rod,Co. Cork,,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 : 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)
						Non	Non Haz Waste: Address of Recover/Disposer		Non	Non Haz Waste: Address of Recover/Disposer		
Within the Country	20 01 35	Yes	89.0	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components	R5	M	Weighed	Offsite in Ireland	KMK Metals Recycling Ltd.,W0113-03	Cappincur Industrial Estate, Daingean Road, Tullamore, Co. Offaly, Ireland	KMK Metals ,W0113-03, Cappincur Industrial Estate, Daingean Road, Tullamore, Co. Offaly, Ireland	Cappincur Industrial Estate, Daingean Road, Tullamore, Co. Offaly, Ireland
Within the Country	20 01 38	No	115.0	wood other than that mentioned in 20 01 37	R3	M	Weighed	Offsite in Ireland	Eras Eco Ltd.,W0211-01	Foxhole, Youghal, Co. Cork, Ireland	Eras Eco Ltd.,W0211-01, Foxhole, Youghal, Co. Cork, Ireland	Eras Eco Ltd.,W0211-01, Foxhole, Youghal, Co. Cork, Ireland
Within the Country	20 01 40	No	100.0	metals	R4	M	Weighed	Offsite in Ireland	Cork Metal Company, CK(S) 491/07	Dublin Hill, Co. Cork, Ireland	Cork Metal Company, CK(S) 491/07, Dublin Hill, Co. Cork, Ireland	Cork Metal Company, CK(S) 491/07, Dublin Hill, Co. Cork, Ireland
Within the Country	20 01 40	No	43.0	metals	R4	M	Weighed	Offsite in Ireland	Davis Recycling Ltd., WP 98067	10 The Anchorage Business Park, Charlotte Quay, Dublin 4, Ireland	Davis Recycling Ltd., WP 98067, 10 The Anchorage Business Park, Charlotte Quay, Dublin 4, Ireland	Davis Recycling Ltd., WP 98067, 10 The Anchorage Business Park, Charlotte Quay, Dublin 4, Ireland
Within the Country	20 03 07	No	565.17	bulky waste	D5	M	Weighed	Offsite in Ireland	Bord Na Mona PLC, W0201-03	Drehid Landfill, Drehid ,Co. Kildare, Ireland	Bord Na Mona PLC, W0201-03, Drehid Landfill, Drehid ,Co. Kildare, Ireland	Bord Na Mona PLC, W0201-03, Drehid Landfill, Drehid ,Co. Kildare, Ireland
Within the Country	20 03 07	No	21.18	bulky waste	R5	M	Weighed	Offsite in Ireland	Greyhound Recycling & Recovery Limited, W0205-01	Industrial Estate, Clondalkin ,Dublin 22, Ireland	Greyhound Recycling & Recovery Limited, W0205-01, Industrial Estate, Clondalkin ,Dublin 22, Ireland	Greyhound Recycling & Recovery Limited, W0205-01, Industrial Estate, Clondalkin ,Dublin 22, Ireland
Within the Country	20 03 07	No	20.72	bulky waste	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd., W0146-02	Knockharley, Navan, Co. Meath, Ireland	Greenstar Holdings Ltd., W0146-02, Knockharley, Navan, Co. Meath, Ireland	Greenstar Holdings Ltd., W0146-02, Knockharley, Navan, Co. Meath, Ireland
Within the Country	20 03 07	No	186.86	bulky waste mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	R13	M	Weighed	Offsite in Ireland	Greenstar Limited, W0053-03	Fassaroe, Bray, Co. Wicklow, Ireland	Greenstar Limited, W0053-03, Fassaroe, Bray, Co. Wicklow, Ireland	Greenstar Limited, W0053-03, Fassaroe, Bray, Co. Wicklow, Ireland
Within the Country	17 01 07	No	30.28	aqueous liquid wastes other than those mentioned in 16 10 01	R13	M	Weighed	Offsite in Ireland	John Butler & Sons, CK(S) 113/04	Block 402 Grant's Drive, Greenogue Business Park, Rathcoole, Co. Dublin, Ireland	John Butler & Sons, CK(S) 113/04, Block 402 Grant's Drive, Greenogue Business Park, Rathcoole, Co. Dublin, Ireland	John Butler & Sons, CK(S) 113/04, Block 402 Grant's Drive, Greenogue Business Park, Rathcoole, Co. Dublin, Ireland
Within the Country	16 10 02	No	767.12	aqueous liquid wastes other than those mentioned in 16 10 01	R13	M	Weighed	Offsite in Ireland	Rilta Environmental Limited, W0192-03	Foxhole, Youghal, Co. Cork, Ireland	Rilta Environmental Limited, W0192-03, Foxhole, Youghal, Co. Cork, Ireland	Rilta Environmental Limited, W0192-03, Foxhole, Youghal, Co. Cork, Ireland
Within the Country	19 12 07	No	48.8	wood other than that mentioned in 19 12 06	R3	M	Weighed	Offsite in Ireland	Eras Eco Ltd., W0211-01	Sarsfieldcourt Industrial Estate, Glanmire, Co. Cork, Ireland	Eras Eco Ltd., W0211-01, Sarsfieldcourt Industrial Estate, Glanmire, Co. Cork, Ireland	Eras Eco Ltd., W0211-01, Sarsfieldcourt Industrial Estate, Glanmire, Co. Cork, Ireland
Within the Country	20 01 11	No	17.84	textiles	R13	M	Weighed	Offsite in Ireland	Glyntown Enterprises Ltd, WFP-CK-10-0047-02	Cork, Ireland	Glyntown Enterprises Ltd, WFP-CK-10-0047-02, Cork, Ireland	Glyntown Enterprises Ltd, WFP-CK-10-0047-02, Cork, Ireland

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