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ANNUAL ENVIRONMENTAL REPORT

GREENSTAR ENVIRONMENTAL SERVICES LIMITED

MATERIALS RECOVERY FACILITY

BALLYMOUNT

LICENCE NO. W0039-02

JANUARY 2011 – DECEMBER 2011

Prepared For: -

Greenstar Environmental Services Ltd.,
Unit 6,
Ballyogan Business Park,
Ballyogan Road,
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Prepared By: -

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29th March 2012

Project	Annual Environmental Report 2011			
Client	Greenstar Environmental Services Ltd. W0039-02			
Report No	Date	Status	Prepared By	Reviewed By
0480405	26/03/2011	Draft	Barry Sexton MSc.	Michael Watson MA.
0480405	29/03/2011	Final	Barry Sexton MSc.	Michael Watson MA.

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1. INTRODUCTION

This is the 2011 Annual Environmental Report (AER) for the Greenstar Environmental Services Ltd. (GES), Materials Recovery Facility (MRF) at Ballymount Cross, Tallaght, Dublin 24 and covers the period January 2011 to December 2011.

The Waste Licence (W0039-02) is held by GES who leased the site to Panda Waste Services Ltd. (Panda). Panda have operated the site under licence from GES since the 17th June 2010.

The content of the AER is based on Schedule B of the licence and the report format follows guidelines set in the "Guidance Note for Annual Environmental Report" issued by the Environmental Protection Agency (Agency)[1]. Cognisance was also taken of the AER Draft Guidance Document issued in January 2012[2].

[1] EPA (Environmental Protection Agency) 1999 Waste Licensing – Draft Guidance on Environmental Management Systems and Reporting to the Agency

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

2. SITE DESCRIPTION

2.1 Site Location and Layout

The facility is located in Ballymount Industrial Estate, Tallaght, Dublin 24. The surrounding area is extensively developed for commercial and light industrial use, with a number of private residences within 250 m of the facility boundary. The site is accessed off the Ballymount Road, which forms the south western boundary.

The licensed facility encompasses approximately 1.18 ha. There is a single weighbridge at the entrance, with car parking to the east and west. There are two main buildings-Waste Transfer and an adjoining Recycling Building located in the north of the site, with and an Office Block in the south west. There is a vehicle wash and fuel storage bund at the eastern boundary, with an open C&D storage bay to the north a these and a timber storage bay to the east of the Transfer Building.

The majority of the site is paved with concrete and tarmacadam, there was an unpaved area of ground (approximately 700m^2) to the north of the office building which was surfaced in 2011. There is a palisade fence along the south eastern, northern and western boundary and along the north eastern boundary. There are mature trees along the south eastern boundary.

2.2 Waste Management Activities

The facility is licensed to accept and process 150,000 tonnes of waste per annum, comprising municipal waste, commercial and industrial waste (C&I), waste electronic and electric equipment (WEEE) and construction and demolition waste (C&D). There is no limit set for each waste stream, provided the total input does not exceed 150,000 tonnes per annum.

2.2.1 Waste Processes

The key processes carried out include: -

Segregation of recyclable materials (paper, cardboards, plastic, wood, metals, glass) from the Household and C&I wastes;

Bulking up and transfer of waste to appropriately licensed recycling, recovery and disposal outlets;

Segregation, bulking and transfer of C&D waste to appropriately licensed recycling, recovery and disposal outlets.

Household Waste

All waste deliveries are weighed on the weighbridge and then directed to the waste transfer building where material is off-loaded onto the floor. Mixed household waste collected in the 'black bin' is transferred to large bulk transporters, and is then either sent to an appropriate licensed landfill or specialised Materials Recovery Facility.

All incoming household skips either 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 landfill.

The biodegradable wastes that are suitable for composting are sent to an offsite composting facility.

Commercial and Industrial Waste

Both mixed and source segregated waste is delivered to the facility both by Panda and other permitted hauliers. Recyclables are stored in the waste transfer building prior to transfer. Biodegradable wastes suitable for composting are sent to an offsite composting facility. The remaining non-recyclable material is bulked and sent to appropriately licensed landfills.

C&D Waste

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

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	Volvo	L150	300	200
1	Volvo	L220	400	250
1	Fuchs	M318	250	100

3. EMISSION MONITORING

Monitoring of surface water, foul water, noise and dust is carried out in accordance with Condition 9 and Schedule E of the licence. The monitoring locations are shown on Figure 3.1. The monitoring results are submitted to the Agency at quarterly intervals and an overview of the results is presented in this Section.

3.1 Surface Water Monitoring

Rainfall run-off from the roofs and paved yard area is directed to the surface water drainage system. Discharge to the municipal storm sewer is via a grit trap and oil interceptor. There is an inspection point (SW-1) that allows the sampling and inspection of the final surface water discharge to the municipal storm water sewer serving the Industrial Estate. Just after the inspection point inside the facility boundary, there is also a manually operated shut off valve that can be used to stop the discharge of surface water to the municipal storm sewer in the event of an emergency.

Sampling is carried out monthly; however it was only possible to collect two samples (April and November) during the reporting period. During other site visits there was no flow at the sampling location which contained only stagnant water.

The Agency attempted to collect samples at SW-1 in February and August 2011. Due to stagnant conditions samples were also not collected by the Agency.

The sampling and analysis was carried out in accordance with recognised quality assurance and control procedures. The range of analysis included Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), total suspended solids (TSS), pH, electrical conductivity and oils, fats and greases. The results are included on Table 3.1, which also includes the Emission Limit Values (ELV) set in the licence.

Table 3.1 Surface Water Monitoring Results 2011 SW-1

Parameters	Units	Apr	Nov	ELV
pH	pH Units	6.84	7.35	6-10
Electrical	mS/cm	0.415	0.804	-
Suspended Solids	mg/l	*47*	13	30
Fats, Oil, Grease	mg/l	<1	<0.01	10
COD	mg/l	155	210	-
BOD	mg/l	*38*	*122*	20

The ELV for BOD and suspended solids was exceeded in the April monitoring event. On the day of sampling there was no rainfall and therefore no flow at the monitoring location however a sample was taken. The sample was taken from the sump at location SW-1 which contained stagnant surface water runoff from a previous rainfall event. The ELV for BOD was exceeded in the November monitoring event. At the time of monitoring, there had not been any incidents (spill or accidental release) which could be identified as the source. The Agency was informed of these exceedances in accordance with Condition 3.3 and 3.4 of the licence.

3.2 Wastewater Monitoring

Wastewater from the truck wash passes through a grit trap and oil interceptor before discharging to the foul sewer serving the Industrial Estate. Rainfall run off from the diesel filling area, which passes through a separate oil interceptor, and run off from the ramp and hard standing area also discharges to the foul sewer. Monitoring is carried out, in accordance with Schedule E of the licence, bi-monthly at one monitoring location (FW-1).

The sampling and analysis was carried out in accordance with recognised quality assurance and control procedures. The range of analysis included BOD, COD, TSS, pH, detergents and oils, fats and greases. The results are included on Table 3.2 which also shows the ELVs set in the licence. The discharge was fully compliant with the ELVs.

Wastewater flow is calculated using the water supply meter and daily rainfall data and is reported quarterly. The flow for the reporting period was 2,004m^3.

Table 3.2 Wastewater Monitoring Results 2011 FW-1

Parameter	Units	Feb	Apr	May	Jul	Sept	Nov	ELV
pH	pH units	7.6	6.59	7.58	7.93	7.72	7.97	6-10
BOD	mg/l	307	284	173	206	139	271	2000
COD	mg/l	645	659	253	430	930	575	4000
TSS	mg/l	196	188	130	561	134	<10	1000
Fats Oils Grease	mg/l	10	6.6	<0.01	<0.01	0.44	<0.01	100
Detergents	mg/l	0.67	0.66	1.7	2.5	1.7	<0.2	100

3.3 Noise Monitoring

The annual noise survey was conducted in November 2011 and included both daytime and night time monitoring. The monitoring locations include three points on the boundary (B1 – B3) and one noise sensitive location (NSL1). The survey was conducted when the site was operational and confirmed that noise emissions complied with the licence conditions and was not affecting the nearest sensitive receptors. A summary of the noise results are shown on Tables 3.4 and 3.5.

During the daytime survey, the noise emission measured at NSL1 was 72 dB. The noise environment was dominated by local traffic noise on the Upper Ballymount Road. It was not possible to estimate the contribution specifically attributable to the GES facility, however site operations were inaudible. Therefore it is reasonable to conclude that noise emissions from the facility were likely to have been significantly lower than the 55 dB limit set in the Licence at NSL1.

During the night time survey, there was no noise emission from the GES site apart from arrival of a truck at 23.43, and onsite manoeuvring until 23.44. The GES contribution at NSL1 was estimated at significantly lower than 45 dB.

Table 3.4 Noise Monitoring Results 2011 – Daytime Survey

Station	Time	LA_{eq} 30 min dB	LAF_{10} 30 min dB	LAF_{90} 30 min dB	Specific level* dB	Noise audible
B1	1542-1609	70	68	59	68-69	Truck movements locally around GES yard almost continuously present and dominant. During lulls, GES front end loader continuously audible in nearest building. UBR road traffic also continuously audible. No other noise audible. Meas. stopped at 27 min due to battery failure.
B2	1624-1654	66	69	56	63-64	Trucks movements on GES yard dominant when present, although quickly decreasing in number during interval. Front end loader continuously audible in building. Bird calls significant during quieter periods. UBR traffic continuously significant and intrusive.
B3	1547-1617	62	65	57	60-61	Intermittent truck movements through GES entrance and weighbridge area dominant when present. Truck movements also audible within site. UBR traffic continuously audible and significant, masking all other offsite noise sources.
NS1	1706-1736	72	70	62	<<62	UBR traffic continuously dominant and intrusive. No GES emissions audible, apart from sporadic vehicle movements through entrance.

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

Table 3.5 Noise Monitoring Results 2011 – Night-time Survey

Station	Time	LA_{eq} 30 min dB	LAF_{10} 30 min dB	LAF_{90} 30 min dB	Specific level* dB	Noise audible
B1	2205-2235	51	52	48	<<48	No GES noise. M50 traffic audible continuously to S, and dominant. Intermittent traffic on UBR also significant. Distant traffic and commercial activity audible to E.
B2	2240-2310	47	49	44	<<44	No GES noise, apart from fluttering plastic curtains over S doorway to main building, and occasional onsite bird calls. Intermittent UBR traffic audible, although decreasing in volume. M50 traffic to SW continuously dominant. Some traffic and commercial noise audible in distance to E. Aircraft movement at 1049 significantly loud.
B3	2203-2233	54	57	45	<<45	No GES noise. Intermittent UBR traffic dominant when present. During lulls, M50 traffic to S continuously audible and dominant.
NS1	2317-2347	63	63	44	<<44	No GES emissions, apart from arrival of truck x1 at 2343, and onsite manoeuvring until 2344. UBR traffic greatly reduced, although still intermittent. M50 traffic to SW continuously dominant. No other noise audible.

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

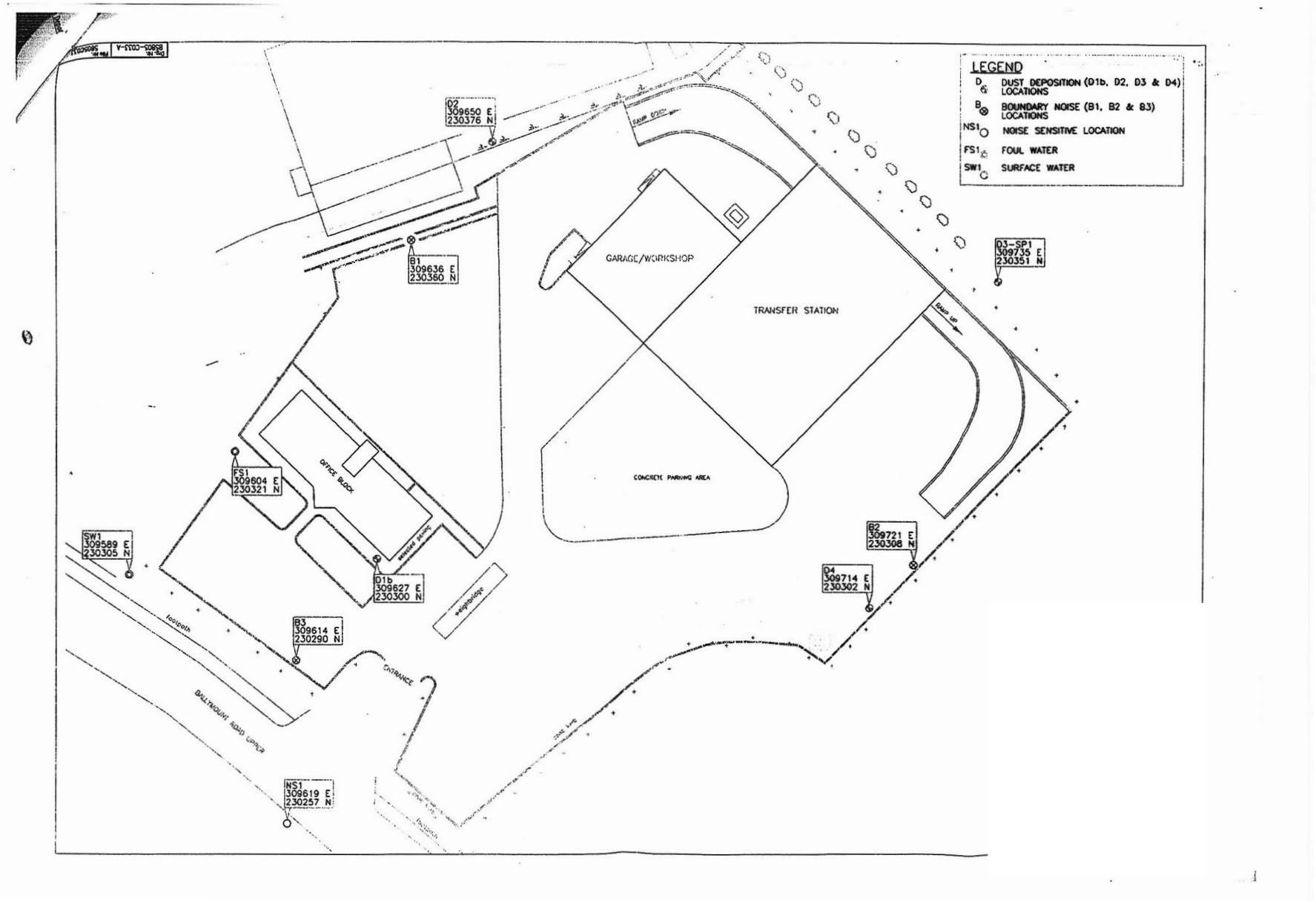
3.4 Dust Monitoring

Dust monitoring was carried out on three occasions in July/August, August/September and December and the results are included in Table 3.5. Out of the twelve measurements there were three exceedances of the deposition limit (350mg/m^2/day). These occurred in July/August at D2 (362.8 mg/m^2/day) and in August/September at D2 and D3 (537.1 mg/m^2/day and 657.4 mg/m^2/day respectively) and the Agency was notified. The source of the elevated levels in D-2 is related to its position under a line of trees and it regularly contains large amounts of tree debris. A source of the elevated levels in D-3 was not identified.

Table 3.4 Dust Monitoring Results 2011

	Units	Jul-Aug	Aug- Sept	Dec - Jan	Deposition Limit Value
D1	mg/m^2/day	103.4	160.2	36	350
D2	mg/m^2/day	362.8	537.1	241.7	350
D3	mg/m^2/day	226.7	657.4	63.7	350
D4	mg/m^2/day	155.4	*	38.8	350

*Dust jar missing at end of monitoring period.



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CLIENT
GES Ballymount

TITLE
Monitoring Locations

Details

FIGURE NUMBER
3.1

Scale
Not To Scale

Job Number:
1104804

4. SITE DEVELOPMENT WORKS

4.1 Engineering Works

There was surfacing of the area beside the administration on building on site in 2011.

There are drainage diversion works planned for 2012 pending agreement with the Agency.

4.2 Summary of Resource & Energy Consumption

Table 4.1 presents an estimate of the resources used on-site during the reporting period.

Table 4.1 Estimates of Resources Used On-Site

Resources	Quantities
Diesel (green)	650 / litres /week
Electricity	245,182 Kwh
Hydraulic Oil	20 litres/wk
Engine Oil	20 litres/wk
Odour Neutraliser	60 litres / week

4.3 Bund Integrity Testing

Condition 4.4 of the licence requires that tank and bund testing be carried out at least once every three years. Testing was carried out in 2008 which confirmed the integrity of the infrastructure was fit for purpose and will was due to be repeated in 2011. The testing was not carried out but it is understood to be scheduled for Q-2 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. Table 5.2 shows the total quantities of waste received and consigned in 2010. 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 list. A more detailed description of the wastes accepted and consigned is provided in the PRTR submission in Appendix 1.

The total quantity of waste received was 72,828.24 tonnes. The total waste consigned was 74,002.75 tonnes. The difference between the waste accepted and consigned consists of waste which was onsite at the end of 2010 and consigned in 2011.

Table 5.1 Waste Received & Consigned 2011

EWC	Description	Waste In	Waste Out
15 01 01	Cardboard Packaging	0.82	-
17 01 07	Rubble	1,321.17	44.00
17 02 01	C&D Wood	802.19	-
17 05 04	Soil & stones	504.34	298.62
17 09 04	Mixed C & D	55,187.21	25,967.82
19 02 03	Premixed wastes composed only of non hazardous waste (Sterile Technologies)	421.16	63.00
19 12 02	Steel out	-	266.18
19 12 07	Timber from WTF	-	1,318.08
19 12 12	Organic Fines in	10.1	-
19 12 12	Processed C&D Waste from WTF	-	29,198.62
20 01 02	Glass	11.37	-
20 01 08	Compostable material	9,030.73	5,672.58
20 01 36	WEEE/White Goods	457.37	370.82
20 01 39	Plastic	1.18	-
20 01 40	Mixed Metals	62.39	-
20 02 01	Green Waste	7.52	-
20 03 01	Dry Recyclable Material	9,598.43	9,617.01
20 03 01	Mixed Municipal waste	64,141.84	68,002.6
20 03 01	C&I Mixed	7,126.87	7,556.86
	Total Received	**148,684.69**	
	Total Consigned		**148,375.25**

Table 5.2 Waste Received & Consigned 2010

EWC	Description	Waste In	Waste Out
15 01 01	Cardboard & Paper Packaging	7,270.62	6,148.60
15 01 02	Plastic Packaging	109.86	549.16
15 01 03	Wooden Packaging	1,009.88	1,665.63
15 01 04	Metallic Packaging	4.56	240.28
15 01 06	Mixed Packaging	528.48	
15 01 07	Glass Packaging	7.26	
16 01 03	Tyres		1.30
16 02 14	White Goods	1,194.06	
17 01 07	Mixed C&D	4.92	
17 09 04	Rubble	524.74	792.88
20 01 01	Paper & Cardboard	35.18	
20 01 02	Glass	10.14	
20 01 08	Commercial Food Waste	1,766.92	487.56
20 01 36	WEEE		1,065.37
20 01 38	Timber	510.66	
20 01 40	Metal	186.08	51.50
20 03 01	Mixed Municipal Waste	66,244.28	65,690.74
20 03 01	Mixed Dry Recyclables	11,437.07	11,729.36
	Total Received	**90,844.71**	
	Total Consigned		**88,524.72**

Table 5.3 Waste Received & Consigned

	2010	2011
Total Received	90,844.71	148,685
Total Consigned	88,524.72	148,375

6. ENVIRONMENTAL INCIDENTS AND COMPLAINTS

6.1 Incidents

The routine monitoring programme identified a number of incidents during the reporting period. Two of these related to exceedances of ELVs for surface water and a further two related to exceedances of the dust deposition limit. The Agency was notified of these exceedances in accordance with licence conditions.

There was a fire related incident that occurred on site on the 31st January 2011. A small amount of material was smouldering in the back of a truck carrying dry recyclables. The material (approximately 1.5tonnes) was tipped in the yard and made safe using water from a fire engine which was called to the site. The Agency was informed of this incident.

6.2 Register of Complaints

Panda maintains a register of the complaints received at the site a copy of which is available for inspection at the facility office. Eight complaints were received during the reporting period in relation to odour. These were immediately addressed by the Facility Management and the register including corrective actions are available for inspection at the facility offices.

7. ENVIRONMENTAL DEVELOPMENT & CONTROL

7.1 Environmental Management Programme Report

Panda has taken on the Environmental Management System (EMS) developed for the facility. The schedule of Objectives and Targets developed by GES, 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

Management and Staffing structure: -

Name: David Boyd

Responsibility: Facility Manager

Experience: 7+ years in waste management with Nurendale Ltd. and Midlands Waste. Completed the FÁS Waste Management Course. The course was completed in January 2012.

Name: Liz Maguire

Responsibility: Deputy Facility Manager

Experience: 8+ years in waste management with Panda and Veolia Environmental Services. Completed the Waste Management and EPA Waste Licence Training course. The course was completed in January 2012.

Name: Paddy Mooney

Responsibility: Yard Supervisor

Experience: 6+ years in waste management with Nurendale Ltd. Completed the Waste Management and EPA Waste Licence Training course. The course was completed in January 2012.

Name: David Jervis

Responsibility: Operations Manager Panda

Experience: 10 years experience waste management experience; has completed the FÁS waste management course.

Name: David Naughton

Responsibility: Environmental Manager Panda

Experience: 6 years experience waste management experience. Completed the Waste Management and EPA Waste Licence Training course. The course was completed in January 2012.

7.1.2 Staff Training

Liz Maguire (Weighbridge) and Paddy Mooney (Yard Supervisor) commenced the approved equivalent course to the FÁS waste management course. The course was completed in January 2012.

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 – Review & Assess the Effectiveness of Nuisance Control Procedures
Nuisances are recorded in the daily check sheet. Cannon Hygiene was contracted during the reporting period to provide vermin control measures onsite. In general nuisances were not an issue in 2011.

Objective 2 – Pollution Prevention
Monitoring results and daily checks are reviewed for unusual reoccurring patterns.

Objective 3 – Improve Dust Mitigation Measures
Dust curtains were installed at the entrance to the Transfer Station building during the reporting period.

Objective 4 – Improve MRF Floor Layout
The internal walls have been replaced with mass concrete walls. The picking hut and baler were removed to increase floor space in the transfer building.

Objective 5 – EMS
The EMS was maintained during the reporting period.

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 7.2.

7.3 Communications Programme

Panda has drawn up a Communications Programme, which details how members of the public are facilitated in accessing environmental information at the facility. Members of the public who wish to inspect these files may do so ant any reasonable time by making an appointment with the Operations Manager using the telephone number posted on the main facility entrance sign.

7.4 Report Financial Provision

GES 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

A vermin control company, Cannon Hygiene, is contracted to carry out nuisance control at the facility.

7.6 European Pollutant Release and Transfer Register Regulation

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

Table 7.1 Objectives and Targets for 2011

No	Objective	Target	Responsibility	Status
1	**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**	**Continuous**
2	**Pollution Prevention**	Strive to ensure that monitoring results comply with the licence limits and investigate any exceedances of emission limit values.	**Site Management**	**Continuous**
3	**Improve Dust Mitigation Measures**	Install Dust curtains on the entrance/exit to the MRF building	**Site Management**	**Completed**
4	**Improve MRF Floor Layout**	Assess and upgrade the MRF floor layout and rearrange in order to improve waste segregation practices.	**Site Management**	**Completed**
5	**EMS**	Revise waste procedures and emergency response plans for the facility.	**Site Management**	**Continuous**

Table 7.2 Schedule of Objective and Targets 2012

No	Objective	Target	Responsibility	Timescale
1	**Investigate Surface Water Drainage**	Investigate and rectify any defects in the surface water drainage system that has resulted in Surface Water ELV's been exceeded.	**Site Management**	**End Q2 2012**

8. OTHER REPORTS

No other reports were requested by the Agency.

APPENDIX 1

European Pollutant Release and Transfer Register

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

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

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 2

Procedures List

Environmental Protection Agency

Guidance to completing the PRTR workbook

AER Returns Workbook

Version 1.1.13

REFERENCE YEAR	2011

1. FACILITY IDENTIFICATION

Parent Company Name	Greenstar Environmental Services Limited
Facility Name	Greenstar Environmental Services (Ireland) Limited
PRTR Identification Number	W0039
Licence Number	W0039-02

Waste or IPPC Classes of Activity

No.	class_name
3.12	Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.11	Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.13	Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.
4.13	Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.
4.2	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).
4.3	Recycling or reclamation of metals and metal compounds.
4.4	Recycling or reclamation of other inorganic materials.

Address 1	Ballymount Cross
Address 2	Tallaght
Address 3	Dublin 24
Address 4	
	Dublin
Country	Ireland
Coordinates of Location	-6.35528 53.3121
River Basin District	IEEA
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	Suzanne Byrne
AER Returns Contact Email Address	suzanne.byrne@greenstar.ie
AER Returns Contact Position	Environmental Engineer
AER Returns Contact Telephone Number	01-2947949
AER Returns Contact Mobile Phone Number	0860433983
AER Returns Contact Fax Number	01-2947900
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	0
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

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

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

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

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

4.2 RELEASES TO WATERS

Link to previous years emissions data

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					QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	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					QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	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					QUANTITY			
			Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	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

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			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	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			
			Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
303	BOD	M	PER	Calculated based on annual flow rate. Analysis is ISO accredited	460.9	460.9	0.0	0.0
306	COD	M	PER	Calculated based on annual flow rate. Analysis is ISO accredited	1166.4	0.0	0.0	0.0
240	Suspended Solids	M	PER	Calculated based on annual flow rate. Analysis is ISO accredited	484.5	0.0	0.0	0.0
314	Fats, Oils and Greases	M	PER	Calculated based on annual flow rate. Analysis is ISO accredited	11.38	0.0	0.0	0.0
308	**Detergents (as MBAS)**	M	PER	Calculated based on annual flow rate. Analysis is ISO accredited	2.89	0.0	0.0	0.0

4.4 RELEASES TO LAND

Link to previous years emissions data

SECTION A : PRTR POLLUTANTS

RELEASES TO LAND					Please enter all quantities in this section in KGs		
POLLUTANT		METHOD			QUANTITY		
			Method Used				
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		
			Method Used				
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

Please enter all quantities on 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	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	17 01 01	No	44.0	concrete	R13	M	Weighed	Offsite in Ireland	Nurendale Ltd (t/a Panda Waste) ,W0261-01	Cappagh Rd ,Finglas ,Dublin 11 ,.,ireland		
Within the Country	17 05 04	No	88.54	soil and stones other than those mentioned in 17 05 03	R5	M	Weighed	Offsite in Ireland	Louth Co Co ,W0060-02	Whiteriver Landfill ,Dunleer ,Co Louth ,.,ireland		
Within the Country	17 05 04	No	210.08	soil and stones other than those mentioned in 17 05 03	R13	M	Weighed	Offsite in Ireland	Nurendale Ltd (t/a Panda Waste) ,W0261-01	Cappagh Rd ,Finglas ,Dublin 11 ,.,ireland		
Within the Country	17 09 04	No	25967.82	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	R13	M	Weighed	Offsite in Ireland	Nurendale Ltd (t/a Panda Waste) ,W0261-01	Cappagh Rd ,Finglas ,Dublin 11 ,.,ireland		
Within the Country	19 02 03	No	41.56	premixed wastes composed only of non-hazardous wastes	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Limited,W0165-02	Ballynagran,Coolbeg and Kicandra,Co. Wicklow,.,Ireland		
Within the Country	19 02 03	No	21.44	premixed wastes composed only of non-hazardous wastes	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Limited,W0146-01	Knockharley,Kentstown,Co. Meath,.,Ireland		
Within the Country	19 12 02	No	266.18	ferrous metal	R4	M	Weighed	Offsite in Ireland	Multi Metals,ESS/15/8/12	Blessington,Co. Wicklow,.,.,Ireland		
Within the Country	19 12 07	No	1318.08	wood other than that mentioned in 19 12 06	R13	M	Weighed	Offsite in Ireland	Nurendale Ltd (t/a Panda Waste) ,W0261-01	Cappagh Rd ,Finglas ,Dublin 11 ,.,ireland		
Within the Country	19 12 12	No	29183.72	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R13	M	Weighed	Offsite in Ireland	Nurendale Ltd (t/a Panda Waste) ,W0261-01	Cappagh Rd ,Finglas ,Dublin 11 ,.,ireland		
Within the Country	19 12 12	No	14.9	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R13	M	Weighed	Offsite in Ireland	Nurendale Ltd (t/a Panda Waste) ,W0261-01	Cappagh Rd ,Finglas ,Dublin 11 ,.,ireland		
Within the Country	20 01 08	No	2017.64	biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	Acorn Recycling,W0249-01	Littleton,Co. Tipperary,.,.,Ireland		
Within the Country	20 01 08	No	354.56	biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	Miltown Composting ,W0270-01	Milltownmore ,Fethard ,Co Tipperary ,.,ireland		
Within the Country	20 01 08	No	2581.58	biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	O'Toole Composting ,WFP-CW-10-0003-01	Ballintrane , Fenagh ,Co Carlow ,.,ireland		
Within the Country	20 01 08	No	210.22	biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	Citibin ,W0013-01	Galway City Co , Headford Rd ,Galway ,.,ireland		
Within the Country	20 01 08	No	508.58	biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	Thorntons Waste Disposal , W0195-01	Kilmainhamwood ,Kells ,Co Meath,.,ireland		
Within the Country	20 01 36	No	78.42	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	R4	M	Weighed	Offsite in Ireland	TechRec Irl ,W0233-01	Nangor Rd ,Dublin 12 ,.,.,ireland		

To Other Countries	20 01 36	No	292.4	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	R4	M	Weighed	Abroad	NWP Recycling ,.	Portadown ,Co Armagh ,.,.,ireland
Within the Country	20 03 01	No	453.42	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Nurendale Ltd (t/a Panda Waste) ,W0261-01	Cappagh Rd ,Finglas ,Dublin 11 ,.,ireland
Within the Country	20 03 01	No	93.1	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	•Clean (Irl.) Refuse & Recycling Co. Ltd. ,002/07/WPT/CL	Kilrush,Clare,.,.,Ireland
Within the Country	20 03 01	No	840.84	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Killarney Waste Disposal ,W217-01	Killarney ,Co Kerry ,.,.,ireland
Within the Country	**20 03 01**	**No**	55.1	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Greyhound Recycling & Recovery,W0205-01	Crag Avenue,Clondalkin Industrial Estate,Clondalkin ,Dublin 22,Ireland
Within the Country	20 03 01	No	8174.55	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Dillon Recycling,WFP-KY-10-001	Tralee,Kerry,.,.,ireland
Within the Country	20 03 01	No	69.45	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Nurendale Ltd (t/a Panda Waste) ,W0261-01	Cappagh Rd ,Finglas ,Dublin 11 ,.,ireland
Within the Country	20 03 01	No	5.54	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Fingall Co Co , W0009-03	Balleally Landfill , Lusk ,Co Dublin,.,ireland
Within the Country	20 03 01	No	1508.59	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Bord na Mona. ,W0201-03	Drehid Landfill , Carbury ,Co Kildare ,.,ireland
Within the Country	20 03 01	No	2606.08	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Limited,W0165-02	Ballynagran,Coolbeg and Kicandra,Co. Wicklow,.,Ireland
Within the Country	20 03 01	No	1152.12	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Limited,W0146-01	Knockharley,Kentstown,Co. Meath,.,Ireland
Within the Country	20 03 01	No	113.01	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	KTK Landfill ,W0081-04	Brownstown ,Kilcullen ,Co Kildare ,.,ireland
Within the Country	20 03 01	No	2058.91	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Louth Co Co ,W0060-02	Whiteriver Landfill ,Dunleer ,Co Louth ,.,ireland
Within the Country	20 03 01	No	42.16	mixed municipal waste	D10	M	Weighed	Offsite in Ireland	Indaver IWMF ,W0167-02	Carlanstown , Duleek ,Co Meath ,.,ireland
Within the Country	20 03 01	No	625.05	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Nurendale Ltd (t/a Panda Waste) ,W0261-01	Cappagh Rd ,Finglas ,Dublin 11 ,.,ireland
Within the Country	20 03 01	No	49.84	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Fingall Co Co , W0009-03	Balleally Landfill , Lusk ,Co Dublin,.,ireland
Within the Country	20 03 01	No	13577.31	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Bord na Mona. ,W0201-03	Drehid Landfill , Carbury ,Co Kildare ,.,ireland
Within the Country	20 03 01	No	23454.7	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Limited,W0165-02	Ballynagran,Coolbeg and Kicandra,Co. Wicklow,.,Ireland
Within the Country	20 03 01	No	10369.05	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Limited,W0146-01	Knockharley,Kentstown,Co. Meath,.,Ireland
Within the Country	20 03 01	No	1017.13	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	KTK Landfill ,W0081-04	Brownstown ,Kilcullen ,Co Kildare ,.,ireland
Within the Country	20 03 01	No	18530.15	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Louth Co Co ,W0060-02	Whiteriver Landfill ,Dunleer ,Co Louth ,.,ireland
Within the Country	20 03 01	No	379.44	mixed municipal waste	D10	M	Weighed	Offsite in Ireland	Indaver IWMF ,W0167-02	Carlanstown , Duleek ,Co Meath ,.,ireland