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ANNUAL ENVIRONMENTAL REPORT
STARRUS ECO HOLDINGS LTD
MATERIALS RECOVERY FACILITY
SIX CROSS ROADS BUSINESS PARK
WATERFORD
LICENCE NO. W0177-03
JANUARY 2014 – DECEMBER 2014

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Client	Starrus Eco Holdings Ltd. W0177-03			
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1. INTRODUCTION

This is the 2014 Annual Environmental Report (AER) for the Starrus Eco Holdings Ltd., (Greenstar) Materials Recovery Facility (MRF) at Six Cross Roads Business Park, Waterford (W0177-03) and covers the reporting period January 2014 to December 2014. Transfer of the licence from Greenstar Limited to Starrus Eco Holdings Ltd was completed in March 2014.

The content is based on Schedule F of the Waste 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 Cognisance was also taken of the Agency AER Draft Guidance Document and AER Information Templates issued by the Agency in January 2012².

¹ EPA (Environmental Protection Agency) 1999 Waste Licensing – Draft Guidance on Environmental Management Systems and Reporting to the Agency

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

2. SITE DESCRIPTION

2.1 Site Location and Layout

The subject site is located at Six Cross Roads Business Park, Carriganard, approximately 3.5 km southwest of Waterford City Centre. It is in an industrial area on the outskirts of the City. The area to the west of the facility is mainly farmland. The nearest residential area is the Ballybeg housing estate, which is approximately 500 m to the north. The facility encompasses approximately 9,300 m² and is accessed by a county road (Green Road) off the N25 National Primary Route. This county road, which forms the western site boundary, is a cul-de-sac which is used solely for access to the facility. The southern and eastern boundaries are formed by the Six Cross Roads Business Park and the northern boundary by the closed Waterford City Compost Facility.

There are two waste processing buildings. The Main Building houses the offices and Commercial and Industrial waste (C&I) recycling activities and bulk waste transfer. The Lean-To, which is to the west of the Main Building, is used for recovered timber, green waste and bulky waste processing and additional bale storage. The open yard areas are paved and are used for external waste storage bays (C&D, glass, and metals), skip storage, truck parking and a vehicle washing area. A civic amenity area is established in the southwest of the facility.

2.2 Waste Management Activities

The facility is licensed to accept and process 80,000 tonnes of waste per annum, comprising household waste, construction and demolition waste (C&D) and commercial and industrial waste (C&I).

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 (25,000 tonnes)
- Commercial & Industrial (50,000 tonnes)
- Construction & Demolition (5,000 tonnes)

No hazardous wastes are accepted. The maximum amount of each waste type accepted, 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);
- Recycling of hard plastics through granulation;
- Baling of recyclable materials;
- Bulking up of Municipal Solid Waste;
- Segregation and bulking of C&D waste;
- Transfer of recovered and residual materials to appropriately licensed recycling, recovery and disposal outlets;

Household Waste

Residual, or black bin household waste, arrives in refuse collection vehicles and is transferred from the vehicles into large bulk transporters for consignment to an appropriately licensed landfill. Source segregated household dry recyclables are baled and stored prior to transfer to off-site permitted/licensed recycling facilities.

Commercial and Industrial Waste

Both mixed and segregated commercial waste is collected from commercial sources. Commercial waste containing recyclable material (paper, cardboard, glass, metal, green waste and wood) is delivered to the facility both by permitted third party hauliers and by GES vehicles. Plastic, card and paper are baled and stored prior to transfer to a suitable permitted/licensed off-site recycling outlet. Biodegradable wastes suitable for composting which is accepted at the facility are sent to an offsite composting facility. The remaining non-recyclable material is bulked and sent to appropriately licensed landfills. Shredding of hard plastics (PVC and Polypropylene) takes place on site for transport as raw materials for plastic goods manufacturers.

C&D Waste

Waste loads include mixed construction and demolition wastes and soil and stone. The material arrives in skips of varying sizes. The 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 Plant List – 2014

No.	Plant	Model	Operational Capacity tpd	Standby Capacity tpd
1	Loading Shovel	Volvo L90F	200	120
2	Excavating Grab x 2	Caterpillar 312	150	100
3	Forklift x 2	Jungheinrich	2.5 t	
4	Timber shredder	Doppstadt AK430	20t/hour	
5	Road Sweeper	Iveco 180E23	500 lts	
6	Recycling Bailer	PAAL PGS15050	15/20T/hour	
7	Plastic granulator	Enginplast BA800	600kgs/hour	
8	Confidential shredder	Ulster U-15	15KW	

In 2014, the facility acquired one additional excavating grab, an extra forklift, a timber shredder, a road sweeper, a recycling baler, a plastic granulator and a confidential shredder.

3. EMISSION MONITORING

The monitoring specified in the licence includes surface water, wastewater, groundwater, dust and noise monitoring. The monitoring locations are shown on Figure 3.1. The monitoring results are included in reports submitted to the Agency at quarterly intervals and an overview of the monitoring completed in 2014 is presented in this section.

3.1 Surface Water Monitoring

The facility's surface water drainage system collects run-off from paved areas and roof rainwater and discharges at separate locations to a culverted stream serving the Business Park.

The original agreed monitoring locations were SW-1, SW-2, SW-3 and SW-4. In June 2012 the Agency agreed to replace SW-1 and 2 with SW-5, which is the point at which the combined discharge point to the stream for the storm sewers from the east and south of the site and the sewers that take run-off from the Main Recycling Building and Offices. SW-3 is downstream of an oil interceptor on the drain that takes runoff from the western yard, and is a separate discharge point. SW-4 is at the discharge point to the stream for run-off roof of the Lean To in the north western section of the site. The locations are shown on Figure 3.1.

The monitoring results are shown on Tables 3.1 to 3.7. Due to dry conditions in some months no surface water samples were obtained. The results include the proposed warning and action levels developed by Greenstar in Q1 2010. There were two exceedances of the warning level for ammonia in June and September 2014 at SW-5, and one exceedance of the warning level for electrical conductivity in June 2014 but no breach of the action levels throughout 2014.

There was significant focus on materials storage and drain maintenance at the facility during 2012 and 2013 which has led to an improvement in the surface water discharge quality over this time. Overall results for surface water at each monitoring location have markedly improved between 2011 and 2014.

Table 3.1 Surface Water Monitoring Results – January 2014

Parameter	Units	SW-3	SW-4	SW-5	Warning Levels	Action Level
Ammonia	mg/l	0.11	0.16	1.37	2.0	4.4
Conductivity	mS/cm	0.297	0.277	0.303	0.466	0.774

Table 3.2 Surface Water Monitoring Results – February 2014

Parameter	Units	SW-3	SW-4	SW-5	Warning Levels	Action Level
Ammonia	mg/l	1.09	0.05	1.03	2.0	4.4
Conductivity	mS/cm	0.378	0.356	0.249	0.466	0.774

Table 3.3 Surface Water Monitoring Results – June 2014

Parameter	Units	SW-3	SW-4	SW-5	Warning Levels	Action Level
Ammonia	mg/l	1.60	0.62	4.06	2.0	4.4
Conductivity	mS/cm	0.489	0.049	0.171	0.466	0.774

Table 3.4 Surface Water Monitoring Results – August 2014

Parameter	Units	SW-3	SW-4	SW-5	Warning Levels	Action Level
Ammonia	mg/l	1.45	0.26	1.27	2.0	4.4
Conductivity	mS/cm	0.446	0.035	0.113	0.466	0.774

Table 3.5 Surface Water Monitoring Results – September 2014

Parameter	Units	SW-3	SW-4	SW-5	Warning Levels	Action Level
Ammonia	mg/l	0.22	0.41	2.54	2.0	4.4
Conductivity	mS/cm	0.114	0.072	0.113	0.466	0.774

Table 3.6 Surface Water Monitoring Results – October 2014

Parameter	Units	SW-3	SW-4	SW-5	Warning Levels	Action Level
Ammonia	mg/l	0.12	0.22	0.26	2.0	4.4
Conductivity	mS/cm	0.06	0.037	0.289	0.466	0.774

Table 3.7 Surface Water Monitoring Results – November 2014

Parameter	Units	SW-3	SW-4	SW-5	Warning Levels	Action Level
Ammonia	mg/l	0.08	0.12	1.37	2.0	4.4
Conductivity	mS/cm	0.066	0.027	0.218	0.466	0.774

3.2 Foul water Monitoring

The wastewater discharge (vehicle cleaning and run off from hard-standing at the entrance to the main recycling building) to the municipal sewer was monitored at quarterly intervals up to Q-1 2013. The Agency issued a Technical Amendment (TA) of the licence in Q-1 2013 allowing for an increase in the detergents ELV and the volume of waste water allowed to be discharged to the sewer. The TA also increased the monitoring frequency from quarterly to monthly. The wastewater passes through a petrol/oil interceptor before discharging to the Six

Cross Roads Business Park sewer before ultimately connecting to the municipal sewer. Flow is measured using a continuous flow meter.

It was not possible to collect samples of wastewater in March or April 2014. The July sample was collected on the 7th August.

The wastewater sampling is carried out at location FW-1, as shown on Figure 3.1. FW-1 is downstream of the interceptor and the continuous flow meter. The monitoring results are presented in Table 3.8, which also includes the emission limit values (ELV) set in the Licence.

Emission limit values for the grab sample were not exceeded during monitoring events in February, May (x 2 events), August or in December.

The BOD concentration was above the Emission Limit for a grab sample (1.2 times the Emission limit) in June. Total Suspended Solids concentrations exceeded the Emission limit for a grab sample in October and November. The sample of wastewater taken in September was poor with exceedances of the pH, BOD and COD Emission Limits for a grab sample. Following this sampling event the foul sewerage system underwent an inspection and clean out of the lines and holding tank. The above parameters returned to within the normal range of concentrations but there followed two exceedances of TSS in October and November. All the results were below the Emission Limit for a grab sample in December.

Table 3.8 Foul water Monitoring Results 2014.

Parameter	Units	Jan	Feb	May	June	7 th Aug	25 th Aug	Sept	Oct	Nov	Dec	Emission Limit	Emission Limit (Grab Sample)*
pH	pH Units	6.65	6.69	6.38	6.15	6.9	6.87	5.73	6.97	7.11	6.65	6 – 9	6-9
BOD	mg/l	276	75	440	608	88	180	2,610	61	21	472	400	480
COD	mg/l	503	158	788	1120	214	425	3,825	161	451	702	1,100	1,320
Total Suspended Solids	mg/l	983	271	102	358	81	270	345	650	1,726	81	300	360
Oils, Fats & Greases	mg/l	11.09	<0.01	<0.01	0.36	0.23	0.43	1.82	1.33	<0.010	<0.010	10	12
Surfactants (MBAS)	mg/l	1.4	0.5	1.4	1.7	1.7	4.6	3.3	1.9	0.7	5	30	36

* Condition 4.1.2 (i) For parameters other than pH and temperature, no grab sample value shall exceed 1.2 times the emission limit value.

3.3 Groundwater Monitoring

Groundwater monitoring is not specified in the licence, however monitoring is carried out annually at two monitoring wells (BH-1 and BH-3) as agreed with the Agency. BH-1 is off-site and up-gradient in the adjoining closed Waterford City Council Composting facility (W0234-01) and BH-3 is on-site as shown on Figure 3.1.

There are no emission limits or trigger levels set in the licence and so the results are compared to the Interim Guideline Values (IGV) on groundwater quality published by the Agency and the Groundwater Regulations Threshold Value (GTV), which were introduced in 2010 (S.I. 9 of 2010). The IGV represent typical background or unpolluted conditions; however levels higher than the IGV may occur naturally depending on the local geological and hydrogeological conditions. While the GTV are more appropriate for large scale abstraction wells used for potable supply, they can be used to assess the significance of contamination where present in non-potable groundwater supplies. Because GTVs have not been established for all of the parameters monitored, the relevant IGV was used for comparative purposes.

The results are shown on Table 3.9 and indicate that there is no evidence that site activities are impacting on groundwater quality. The IGVs or GTVs were not exceeded at either location in June 2014. The monitoring carried out in June 2014 showed that the groundwater quality is good.

High levels of suspended solids are present in each well. Based on the borehole logs, the well depths range from 22 to 27m bgl (meters below ground level). BH-1 is exclusively in the subsoils, while BH-3 straddles the subsoils and the bedrock, which is a siltstone. The subsoils in BH-1 are described as very fine grained alluvial deposits, while in BH-3 they are described as sand with small elements of clay. There is a gravel pack around the well pipe but no filter sock on the slotted section. Given the absence of a filter sock and the nature of the subsoils, it is not unexpected that suspended solids present in the groundwater are being drawn into the well pipe during purging. They are naturally occurring, are not indicative of contamination and are of no environmental significance.

Table 3.9 Groundwater Monitoring Results – June 2014

Parameter	Units	BH-1	BH-3	GTV	IGV
BOD	mg/l	3	<1	-	-
Dissolved Oxygen	mg/l	9	8	-	NAC
Oils, Fats & Greases	mg/l	<0.01	<0.01	-	-
Total Phosphorus	mg/l	2.584	0.560	-	-
Ammoniacal Nitrogen	mg/l	0.02	0.02	0.065 - 0.175	-
Conductivity	mS/cm	0.622	0.490	1.875	-
DRO	mg/l	<0.01	<0.01	-	0.01
Aliphatic Hydrocarbons	mg/l	<0.01	<0.01	-	-
Undecane	mg/l	<0.01	<0.01	-	-
Total Suspended Solids	mg/l	4,620	2,363	-	-

3.4 Noise Monitoring

The annual noise survey was conducted in June 2014. The monitoring locations include three boundary locations (N1 – N3) and two off site noise sensitive locations (NS1 and NS2). The survey was conducted when the site was fully operational and confirmed that noise emissions fully complied with the licence and that the facility is not impacting negatively on the nearest sensitive receptors. A summary of the noise results is shown on Table 3.10.

Table 3.10 Noise Monitoring Results 2014

Station	Time	L _{Aeq} 30 min dB	L _{AF10} 30 min dB	L _{AF90} 30 min dB	Specific level* dB	Noise audible
N1	0957-0927	67	67	54	67	Trucks and plant on nearest part of Greenstar yard and at near end of building dominant, although site noticeably quieter after 0910. No other noise audible apart from bird calls (significant, from crows, gulls and starlings).
N2	0822-0852	68	72	58	67	Noise emissions from various Greenstar sources on yards and in buildings clearly audible, particularly intermittent trucks passing N2. Truck queuing for weighbridge 0831-0834 intrusive. Yard sweeper truck around site significant from 0845. Emissions from offsite premises also significant, particularly activity at adjacent plant hire premises (incl. plant engine dominant to 0828, and power washer <5 m from N2 from 0847). No other noise audible apart from crows.
N3	1046-1116	47	50	43	45	Noise emissions from site almost continuously clearly audible, particularly loader and/or excavator operating in main building. Traffic on bypass road to W almost continuously audible at low level. Bird song/calls. No traffic using local road.
NS1	1010-1040	59	63	40	<40	Site emissions not audible. Intermittent local road traffic dominant when present. Distant traffic on roads and through residential estates audible. Waste compactor truck slightly audible in distant estate. Bird song/calls and aircraft.
NS2	0934-1004	65	69	47	<47	No site emissions audible. Frequent passing road traffic dominant, and almost continuously audible on approaches. Distant grass mower continuously audible in background. No other noise audible apart from local bird song/calls.

*Specific level: L_{Aeq} level considered attributable to facility during interval, determined using real time assessment, field notes, time history profiles, statistical analysis, frequency spectra, spectral statistics and near field correction if applicable.

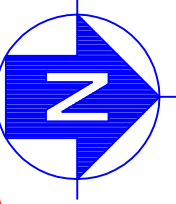
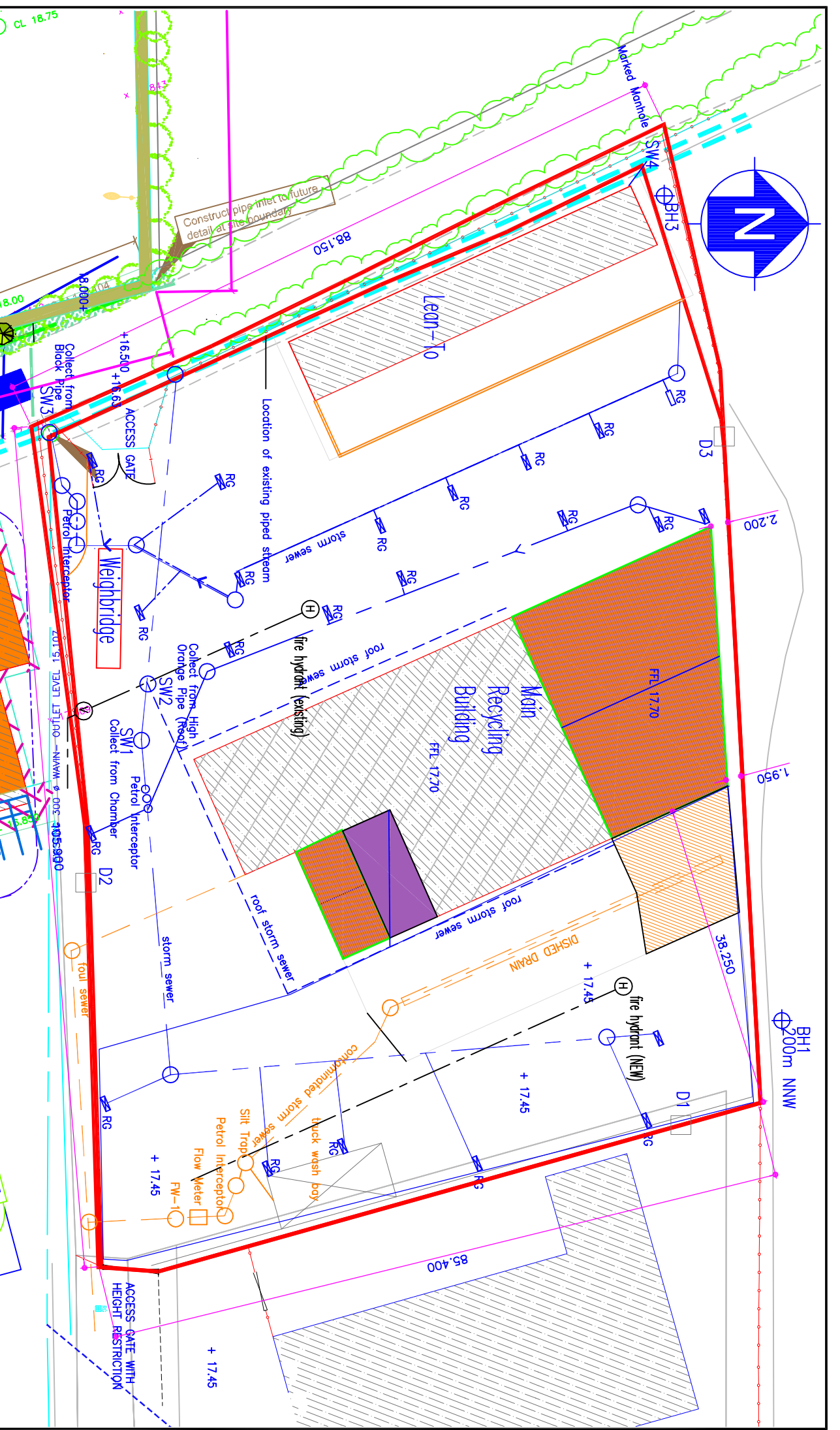
3.5 Dust Monitoring

Dust monitoring was carried out on three occasions at three on-site locations (D1, D2 and D3) in May, July and August 2014. The results of the monitoring are included on Table 4.1.

The dust emission limit (350 mg/m²/day) was not exceeded. No complaints relating to dust were received from neighbouring premises during the reporting period.

Table 3.11 Dust Monitoring Results 2014

Dust Emission (mg/m²/day)	May	July	August	Emission Limit
Sample Location	(30 days)	(30 days)	(32 days)	(mg/m²/day)
D1	23.1	27.2	15.9	350
D2	112.7	41.2	33.8	350
D3	52.3	105.1	40.3	350



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CLIENT	Greenstar Environmental Services
TITLE	Monitoring Locations – Waterford

details

FIGURE No.	3.1
SCALE	NTS
REV.	A

4. SITE DEVELOPMENT WORKS

4.1 Engineering Works

The following works were carried out on site in 2014

- Installation of electronic barrier system at the site entrance (completed in April)
- Ground works at the main entrance (completed in July)
- New Fire Detection & Alarm System (completed in September)
- Ground works in C&D bay area and front of waste shed (completed in November)

4.2 Summary of Resource & Energy Consumption

Table 4.1 presents an estimate of the resources used on-site during the reporting period and in 2013.

Table 4.1 Estimate of Resources Used On-Site in 2013 & 2014

Resources	Quantities 2014	Quantities 2013
Diesel (green)	58,169 Litres	54,901 litres
Electricity	473,900 kwh	7228 kwh
Hydraulic Oil	2,065 Litres	1250 litres
AdBlu Diesel Additive	145 Litres	700 litres
Odour Neutraliser	0 litres	300 litres

4.3 Bund Integrity Testing

Condition 3.11.5 of the licence requires that tank and bund testing be carried out at least once every three years. Integrity testing was carried out in February 2014 and the bunds, interceptors and drainage lines were passed fit for purpose. The reports are retained at the facility for Agency inspection.

5. WASTE RECEIVED AND CONSIGNED FROM THE FACILITY

Table 5.1 shows the total quantities of waste received and consigned from the facility in 2014. 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 waste received and consigned in 2014 is presented in Table 5.1. For comparative purposes the amounts of waste received and consigned from 2009 to 2013 are presented in Table 5.2.

The total quantity of waste received was 38,532 tonnes. The total waste consigned was 38,741 tonnes. The records show that more waste was consigned from the site than accepted. The difference was 209 tonnes. This is due to material being stored in the facility at the end of 2013 prior to consignment in Q1 2014. All the wastes consigned went to authorised recovery and disposal facilities approved by the Agency.

Table 5.1 Waste Received & Consigned 2014

EWC	Description	Waste In	Waste Out
12 12 02	Ferrous Metal Dust & Particles		29.96
15 01 01	Paper and cardboard packaging	4,128.558	6,561.34
15 01 02	Plastic packaging	2,374.589	564.08
15 01 03	Wooden packaging	6.38	317.36
15 01 04	Metallic packaging	18.98	8.52
15 01 05	Composite packaging	1.88	1.862
15 01 06	Mixed packaging	8,219.372	3,296.35
15 01 07	Glass packaging	468.18	562.36
17 02 03	Plastic	1.1	
17 05 04	Soil and stones	1.72	
17 08 02	Gypsum-based construction material	31.72	
17 09 04	Mixed C&D wastes	1,725.66	1,993.4
19 12 04	Plastic & Rubber		62.65
19 12 07	Shredded timber		53.74
19 12 09	Minerals	4.68	
19 12 10	Combustible waste	22.79	
19 12 12	Other wastes (including mixtures of materials) from mechanical treatment of wastes	119.531	13,860.9
20 01 01	Paper & cardboard from municipal sources	1,149.043	1,580.98
20 01 02	Glass from municipal sources	43.08	
20 01 08	Biodegradable kitchen and canteen waste	2,576.1	2,277.91
20 01 11	Textile		0.78
20 01 35	WEEE		8.98
20 01 38	Wood waste from municipal sources	1,480.215	1,000.1
20 01 39	Plastic from municipal sources	90.383	1,898.47
20 01 40	Metals from municipal waste	177.662	145.461
20 02 01	Biodegradable Waste	258.44	362.8
20 03 01	Mixed municipal waste	6,696.862	2,972.81
20 03 03	Street-cleaning residues	1,316.621	1,142.92
20 03 07	Bulky Waste	7,618.512	91.12
Total Received		38,532.06	
Total Consigned			38,741.083
Recovery			36,013.543
Disposal			2,727.54
Recovery Rate			93%

Table 5.3 Waste Received & Consigned

Year	2013	2012	2011	2010	2009
Total Received	55,232	54,627.16	57,592.00	49,011	48,560
Total Consigned	54,523	54,531.76	58,231.15	48,120.34	47,574
Total Recovered	43,092	43,100.65	44,517.00	25,706.16	20,892
Total Disposed	11,431	11,431.11	13,075.00	22,414.18	26,682
Recovery Rate	79%	79%	76%	53.42%	43.92%

6. ENVIRONMENTAL INCIDENTS AND COMPLAINTS

6.1 Incidents

There were occasional breaches of the ELV's for the quality of the foul water discharging from site to the municipal sewer throughout the year. Table 3.8 above provides the detailed information of each of the breaches. Each one was reported to the agency and Waterford City Council at the time of each incident. Each incident is considered to be an isolated incident and is now closed. The breaches are outlined below:

There were exceedances of the ELV for Total Suspended Solids in January, June, September, October and November 2014. There were exceedances of the ELV for Biological Oxygen Demand in June and September 2014. The ELV's for pH and Carbon Oxygen Demand were also exceeded in September 2014.

6.2 Register of Complaints

Greenstar maintains a register of complaints received at the facility offices. No complaints were received during the reporting period.

7. ENVIRONMENTAL DEVELOPMENT & CONTROL

7.1 Environmental Management Programme Report

Greenstar have implemented an Integrated Management System (IMS) in accordance with the requirements of Occupational Health and Safety Assessment Series (OHSAS) 18001:2007 and International Standard Organisation (ISO) 14001:2004 in order to manage the Health, Safety and Environmental performance of their business and to control health and safety risk and to minimise their environmental aspects and impacts.

The IMS has been developed for the achievement of continual improvement taking into account the requirements of the Waste Licence Conditions. Greenstar has prepared and effectively implement documented procedures and instructions in accordance with the requirements of both the OHSAS 18001:2007 and ISO 14001:2004. The facility is accredited to both standards and was subject of a successful re-certification audit in July 2014.

The schedule of Objectives and Targets, including their status for 2014 (Table 7.1), as well as the proposed Objectives and Targets for 2015 (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: Declan O'Reilly
Responsibility: Director of Collections & Transfer
Experience: 13 years waste management experience

Name: Tom Walsh
Responsibility: Operations Manager
Experience: Over 10 years waste management experience; has completed the FÁS waste management course.

Name: Ivan Cummins
Responsibility: Yard Supervisor
Experience: 30 years waste management experience.

Name: Robertas Zemaitaitis
Responsibility: General Yard Operative
Experience: Over 5 years waste management experience; has completed the Patel Tonra (CIWM approved) Waste Management Course in 2014.

Name: Stephanie Pietercelie
Responsibility: Operations & Environmental
Experience: Over 5 years waste management experience; has completed the Patel Tonra (CIWM approved) Waste Management Course in 2014.

7.1.2 *Staff Training*

The following staff training was carried out during the year

- Fire Warden
- Chemical handling
- 360 excavator
- Teleporter
- Loading shovel
- Forklift
- Moffett
- Manual handling
- Reversing
- Waste Management Course (Patel Tonra/FAS equivalent) completed in July by Robertas Zemaitaitis & Stephanie Pietercelie

Details on staff training are retained on the company's electronic Training Management System (TMS).

7.2 **Environmental Management Programme**

7.2.1 *Schedule of Objectives 2014*

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

7.2.2 *Schedule of Objectives 2015*

The schedule of targets and objectives for 2015 are presented in Table 7.2.

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, Health & Safety Policy makes a specific commitment to ensure that this policy and environmental records are available to the public and interested parties.

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

Members of the public who wish to inspect these files may do so at 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

A Decommissioning Management Plan (DMP) and Environmental Liabilities Risk Assessment (ELRA) including Financial Provision (FP) were submitted to the Agency in 2013 as part of the transfer of the licence which occurred in Q1 2014. Both the DMP and ELRA have been approved by the Agency.

The facility has an Integrated Management System (IMS) in place and the site has achieved external accreditation for its implementation of ISO 14001 and OHSAS 18001, environmental and health and safety management systems. Effective implementation of these systems is the most appropriate way to ensure that mitigation measures achieve the required risk reduction on site. The IMS serves as a guidance document for facility staff and describes operational control and management practices that are applied at the facility. The IMS is designed to ensure that management of site activities complies with regulatory requirements and best practice. The IMS includes a detailed Emergency Response Procedure which sets out the steps to be taken in the event of an incident at the facility with the potential to cause environmental damage. Greenstar also implements a comprehensive monitoring programme which will highlight any potential environmental incidents with the potential to cause environmental damage.

7.5 Nuisance Controls

Greenstar has contracted a vermin control company to carry out nuisance control at the facility. Prevent a Pest provide pest control at the facility and also provide for the treatment of insects at the facility if necessary. Daily litter picks and road-sweeping are carried out by yard operators during the course of their daily duties. An odour control system is in place at the facility which can be operated automatically or manually by the Environmental Officer and Operations Supervisor as needed. A site inspection is carried out daily and recorded on the facilities inspection log which is controlled as part of the current Integrated Management System.

7.6 Wastewater Volumes

The volume of wastewater generated during the reporting period was estimated to be 914m³.

Table 7.1 Objectives and Targets for 2014

No.	Objective	Target	Timescale	Responsibility	Status
1	Development and adoption of Fire Prevention Procedure at the facility	Reduce risk of fire and enable early detection	Q2 2014	Site Management / EHS	COMPLETED in Q4
2	Review of Emergency Response Plan to incorporate fire prevention procedure and new structure	Revision of Plan and additional training for site personnel	Q2 2014	Site Management / EHS	Fire Prevention Procedure & New Structure COMPLETED in Q3
3	Achieve re-certification to ISO 14001 and OHSAS 18001 standard	3 year certification period expires in 2014. The facility requires re-certification.	Q3/Q4 2014	Site Management / EHS	COMPLETED in Q3
4	Develop and maintain traffic management plan at the facility	Review of all on-site traffic management	Q2/Q3 2014	Site Management / EHS	COMPLETED in Q2
5	Environmental Training of Facility Staff	Update training presentation and ensure training of key managerial staff	Q2/Q3 2014	Site Management / EHS	COMPLETED in Q3
6	Site Signage	Facility Notice Boards to be replaced to reflect new ownership	Q1 2014	Site Management / EHS	COMPLETED in Q1
7	Energy & Resource Consumption	Continue to summarise energy and resource usage on a quarterly basis with a view to reducing consumption	Ongoing	Site Management / EHS	ONGOING
8	Review and Assess the Effectiveness of Nuisance Control Procedures	Continually review and assess all nuisance control procedures to minimise impact on the surrounding area.	Ongoing	Site Management / EHS	ONGOING
9	Pollution Prevention	Strive to ensure that emissions comply with the licence limits and investigate any exceedances of emission limit values.	Ongoing	Site Management / EHS	ONGOING
10	Site Security	Installation of electronic barrier system at site entrance for site security purposes	Q2 2014	Site Management / EHS	COMPLETED in Q2
11	Ensure Impermeable Hardstanding	Maintenance and repair of site surfaces	Q2 2014	Site Management / EHS	COMPLETED in Q4
12	Bund & Tank Testing	Integrity Testing of all underground tanks and pipelines	Q1 2014	Site Management / EHS	COMPLETED in Q1

Table 7.2 Schedule of Objective and Targets 2015

No	2015 Objective	Target	Timescale	Responsibility
1	Polypropylene line upgrade	Dust control & Health & Safety (AFE request Tom)	Q1	Site Management / EHS
2	Energy Audit	Make site more energy efficient and help reduce the cost of energy bills	Q3	Site Management / EHS
3	Energy & Resource Consumption	Continue to summarise energy and resource usage on a quarterly basis with a view to reducing consumption	Ongoing	Site Management / EHS
4	Review and Assess the Effectiveness of Nuisance Control Procedures	Continually review and assess all nuisance control procedures to minimise impact on the surrounding area.	Ongoing	Site Management / EHS
5	Pollution Prevention	Strive to ensure that emissions comply with the licence limits and investigate any exceedances of emission limit values.	Ongoing	Site Management / EHS
6	Ensure Impermeable Hardstanding	Maintenance and repair of site surfaces	Q2	Site Management / EHS
7	Wheelie Bin Storage	Building of external enclosed/secured wheelie bin storage	Q1	Site Management / EHS
8	Review of Emergency Response Plan	Revision of Plan and additional training for site personnel	Q2	Site Management / EHS
9	Upgrade & maintenance of existing building	Additional sealing of building	Q2 / Q3	Site Management / EHS
10	Document a Preventative Maintenance (PM) plan for inspection and cleaning of plant and equipment wrt fire	Incorporate into existing Site Inspection Database (EF-10A) and site specific PM plans	Q2	Site Management / EHS
11	Document a Preventative Maintenance (PM) plan for inspection of hardstand and drainage infrastructure on site	Incorporate into existing Site Inspection Database (EF-10A)	Q2	Site Management / EHS

No	2015 Objective	Target	Timescale	Responsibility
12	Review EWC codes in active use group wide and implement recommendations at each site	Review EWC codes with Finance/WIMS & advise changes to site management through additional training	Q2	Site Management / EHS

8. OTHER REPORTS

8.1 European Pollutant Release and Transfer Register Regulation

Under the European Pollutant Release and Transfer Register Regulation (EC) No. 166/2006 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.

APPENDIX 1

European Pollutant Release and Transfer Register



| PRTR# : W0177 | Facility Name : Starrus Eco Holdings Limited (Waterford City) | Filename : W0177_2014.xls | Return Year : 2014 |

[Guidance to completing the PRTR workbook](#)

AER Returns Workbook

Version 1.1.18

REFERENCE YEAR	2014
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1. FACILITY IDENTIFICATION

Parent Company Name	Starrus Eco Holdings Limited
Facility Name	Starrus Eco Holdings Limited (Waterford City)
PRTR Identification Number	W0177
Licence Number	W0177-03

Classes of Activity

No.	class_name
-	Refer to PRTR class activities below

Address 1	Carrignard
Address 2	Six Cross Roads
Address 3	Business Park
Address 4	Waterford City
	Waterford
Country	Ireland
Coordinates of Location	-7.14684 52.2345
River Basin District	IESE
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	Malcolm Dowling
AER Returns Contact Email Address	malcolm.dowling@greenstar.ie
AER Returns Contact Position	Group Compliance Manager
AER Returns Contact Telephone Number	012947976
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	33
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

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

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

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

4. WASTE IMPORTED/ACCEPTED ONTO SITE

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

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

[Link to previous years emissions data](#)

| PRTR# : W0177 | Facility Name : Starrus Eco Holdings Limited (Waterford City) | Filename : W0177_2014.xls | Return Year : 2014 |

31/03/2015 18:50

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

POLLUTANT		METHOD			QUANTITY			
RELEASES TO AIR		Please enter all quantities in this section in KGs						
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

POLLUTANT		METHOD			QUANTITY			
RELEASES TO AIR		Please enter all quantities in this section in KGs						
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)

POLLUTANT		METHOD			QUANTITY			
RELEASES TO AIR		Please enter all quantities in this section in KGs						
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:

Starrus Eco Holdings Limited (Waterford City)

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# : W0177 | Facility Name : Starrus Eco Holdings Limited (Waterford City) | Filename : W0177_2014.xls | Return Year : 2014 |

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SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

Data on ambient monitoring of storm/surface water or groundwater, conducted as part of your licence requirements, should NOT be submitted under AER / PRTR Reporting as 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# : W0177 | Facility Name : Starrus Eco Holdings Limited (Waterford City) | Filename : W017

31/03/2015 18:52

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# : W0177 | Facility Name : Starrus Eco Holdings Limited (Waterford City) | Filename : W0177_2014.xls | Return Year : 2014 |

31/03/2015 18:52

SECTION A : PRTR POLLUTANTS

POLLUTANT		RELEASURES 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)

POLLUTANT		RELEASURES 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# : W0177 | Facility Name : Starrus Eco Holdings Limited (Waterford City) | Filename : W0177_2014.xls | Return Year : 2014 |

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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 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	12 01 02	No	29.96	ferrous metal dust and particles	R4	M	Weighed	Offsite in Ireland	Cork Metal Company,WFP-CK-10-0067-01	Dublin Hill,Cork,....Ireland		
To Other Countries	15 01 01	No	745.18	paper and cardboard packaging	R3	M	Weighed	Abroad	Cellmark Asia PTE LTD,IRE/G180/15	.....,Singapore,Singapore		
Within the Country	15 01 01	No	67.94	paper and cardboard packaging	R3	M	Weighed	Offsite in Ireland	Huhtamaki,IRE/AG032/11	.....,ireland		
To Other Countries	15 01 01	No	2664.04	paper and cardboard packaging	R3	M	Weighed	Abroad	MLM (ACN Europe) Ltd ,TFS Broker IRE/G022/11	.....,United Kingdom		
Within the Country	15 01 01	No	1100.92	paper and cardboard packaging	R3	M	Weighed	Offsite in Ireland	Mark Lydon Enterprises Ltd,IRE/G021/12	.....,Ireland		
To Other Countries	15 01 01	No	1644.58	paper and cardboard packaging	R3	M	Weighed	Abroad	Peute Papier Recycling BV,IRE/G006/08	Veeplaat 40,3313 LJ Dordrecht,....,Netherlands		
To Other Countries	15 01 01	No	338.68	paper and cardboard packaging	R3	M	Weighed	Abroad	Saica natur Uk Ltd,IRE/G277/15	.....,United Kingdom		
Within the Country	15 01 02	No	30.78	plastic packaging	R3	M	Weighed	Offsite in Ireland	Materia Environmental Ltd.,IRE/AG161/11	The Kipper House,Scilly,Kinsale,Co. Cork,Ireland		
To Other Countries	15 01 02	No	64.68	plastic packaging	R3	M	Weighed	Abroad	Boost Recycling Limited,IRE/G082/11	.....,United Kingdom		
To Other Countries	15 01 02	No	52.34	plastic packaging	R3	M	Weighed	Abroad	Choice Waste Management,IRE/AG050/11	Denmark House,Brick Close Kiln Farm,Milton Keynes Buckinghamshire,MK11 3DP,United Kingdom Clermont Business Park,Haggardstown,Dundalk, Co. Louth,Ireland		
Within the Country	15 01 02	No	254.18	plastic packaging	R13	M	Weighed	Offsite in Ireland	Leinster Environmentals,WP 2008/06	Park,Haggardstown,Dundalk, Co. Louth,Ireland		
To Other Countries	15 01 02	No	15.66	plastic packaging	R3	M	Weighed	Abroad	MLM (ACN Europe) Ltd ,TFS Broker IRE/G022/11	.....,United Kingdom		
Within the Country	15 01 02	No	47.88	plastic packaging	R3	M	Weighed	Offsite in Ireland	Materia Environmental Ltd.,IRE/AG161/11	The Kipper House,Scilly,Kinsale,Co. Cork,Ireland		
To Other Countries	15 01 02	No	51.44	plastic packaging	R3	M	Weighed	Abroad	Peute Papier Recycling BV,IRE/G006/08	Veeplaat 40,3313 LJ Dordrecht,....,Netherlands		
To Other Countries	15 01 02	No	47.12	plastic packaging	R3	M	Weighed	Abroad	WRC Recycling,IRE/AG121/15	.....,Scotland,United Kingdom		
Within the Country	15 01 03	No	304.74	wooden packaging	R13	M	Weighed	Offsite in Ireland	Clonmel Waste Disposal Ltd ,WP-008-02	Lawlesstown ,Clonmel ,Co Tipperary ,Ireland Millennium Business Park,Grange,Ballycoolin,Dubl in 11,Ireland		
Within the Country	15 01 03	No	12.62	wooden packaging	R13	M	Weighed	Offsite in Ireland	Greenstar Limited,W0183-01	Ballycarney,Enniscorthy,Co. Wexford,....,Ireland		
Within the Country	15 01 04	No	8.52	metallic packaging	R4	M	Weighed	Offsite in Ireland	Molloy Metals,WP08/14b	Rosemount,Ballycoolin,Dublin 11,....,Ireland		
Within the Country	15 01 05	No	1.862	composite packaging	R13	M	Weighed	Offsite in Ireland	Bailey Waste Recycling Ltd,WPT-FG-08-0002-01			
Within the Country	15 01 06	No	47.24	mixed packaging	R13	M	Weighed	Offsite in Ireland	Dillon Waste Ltd,WFP-KY-10-001	The Kerries,Tralee,Co. Kerry,....,Ireland		
Within the Country	15 01 06	No	2136.42	mixed packaging	R13	M	Weighed	Offsite in Ireland	Killarney Waste Disposal ,W0217-01	Aughacurreen,Killarney ,Co. Kerry,....,Ireland		
Within the Country	15 01 06	No	267.68	mixed packaging	R13	M	Weighed	Offsite in Ireland	Oxigen Environmental Ltd.,W0152-03	Robinhood Industrial Estate,Robinhood Road,Ballymount,Dublin 22,Ireland		
Within the Country	15 01 06	No	488.98	mixed packaging	R13	M	Weighed	Offsite in Ireland	Quality Recycling Ltd.,WFP-TS-08-0079-01	Ballylynch,Carrick-on-Suir,Co. Tipperary,....,Ireland		
Within the Country	15 01 06	No	356.03	mixed packaging	R13	M	Weighed	Offsite in Ireland	Starrus Eco Holdings Ltd,W0053-03	Fassaroe,Bray,Co. Wicklow,....,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 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	15 01 07	No	526.68	glass packaging	R13	M	Weighed	Offsite in Ireland	Clonmel Waste Disposal Ltd ,WP-008-02	Lawlesstown , Clonmel ,Co Tipperary ,Ireland		
Within the Country	15 01 07	No	35.68	glass packaging mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	R5	M	Weighed	Offsite in Ireland	Gannon Eco,WFP-WM-2009-0007-01	Ballinagore,Co. Westmeath,Ireland		
Within the Country	17 09 04	No	1993.4	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 11	R13	M	Weighed	Offsite in Ireland	CHI Environmental Ltd ,WMP 023/2007 Boost Recycling Limited,IRE/G082/11	Grannagh ,Kilmacow ,Co Kilkenny ,Ireland		
To Other Countries	19 12 04	No	21.78	plastic and rubber	R3	M	Weighed	Abroad	CNK Holdings,IRE/G415/16	.....,United Kingdom		
To Other Countries	19 12 04	No	40.87	plastic and rubber	R3	M	Weighed	Abroad	Ormonde Organics Ltd,WFP-WD-10-0003-01	.....,United Kingdom		
Within the Country	19 12 07	No	53.74	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 11	R13	M	Weighed	Offsite in Ireland	Ballynagran Landfill limited,W0165-02	Killowen,Portlaw,Co. Waterford,,Ireland		
Within the Country	19 12 12	No	16.06	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D5	M	Weighed	Offsite in Ireland	Clonmel Waste Disposal Ltd ,WP-008-02	Ballynagran,Coolbeg & Kilcandra,Co. Wicklow,,Ireland		
Within the Country	19 12 12	No	79.26	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	O'Toole Composting Ltd,WFP-CW-10-0003-01	Lawlesstown , Clonmel ,Co Tipperary ,Ireland		
Within the Country	19 12 12	No	146.74	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R3	M	Weighed	Offsite in Ireland	Starrus Eco Holdings Ltd,W0053-03	Ballinrane,Fenagh,Co. Carlow,,Ireland		
Within the Country	19 12 12	No	1247.48	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	Robinhood Industrial Estate,Robinhood Road,Ballymount,Dublin 22,Ireland			
Within the Country	19 12 12	No	7124.68	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	Oxigen Environmental Ltd.,W0152-03	Fassaroe,Bray,Co. Wicklow,,Ireland		
Within the Country	19 12 12	No	1877.21	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	Starrus Eco Holdings Ltd,W0116-02	Millennium Business Park,Grange,Ballycoolin,Dublin 11,Ireland		
Within the Country	19 12 12	No	3315.7	paper and cardboard	R13	M	Weighed	Offsite in Ireland	Starrus Eco Holdings Ltd,W0116-02	Six Cross Roads Business Park,Carriganard,Butlerstown,Waterford,Ireland		
Within the Country	20 01 01	No	30.2	paper and cardboard	R3	M	Weighed	Offsite in Ireland	Shred It Ireland,.....,Ireland			
Within the Country	20 01 01	No	140.32	paper and cardboard	R13	M	Weighed	Offsite in Ireland	Bailey Waste Recycling Ltd,WPT-FG-08-0002-01	Rosemount,Ballycoolin,Dublin 11,,Ireland		
To Other Countries	20 01 01	No	726.96	paper and cardboard	R3	M	Weighed	Abroad	MLM (ACN Europe) Ltd ,TFS Broker IRE/G022/11	.....,United Kingdom		
Within the Country	20 01 01	No	351.38	paper and cardboard	R13	M	Weighed	Offsite in Ireland	Mark Lydon Enterprises Ltd,IRE/G021/12	.....,Ireland		
To Other Countries	20 01 01	No	332.12	paper and cardboard	R3	M	Weighed	Abroad	Peute Papier Recycling BV,IRE/G006/08	Veeplaat 40,3313 LJ Dordrecht,,Netherlands		
Within the Country	20 01 08	No	2277.91	biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	Molloy Waste Services to Clonmel Waste Disposal Ltd ,WP-008-02	Lawlesstown , Clonmel ,Co Tipperary ,Ireland		
Within the Country	20 01 11	No	0.78	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components	R13	M	Weighed	Offsite in Ireland	Textile Recycling Ltd ,Licence exempt	Glen Abbey Complex ,Belgard ,Tallaght , Dublin 24 ,Ireland		
Within the Country	20 01 35	Yes	8.98	hazardous components	R4	M	Weighed	Offsite in Ireland	KMK Metals Recycling LTD,W0113-04	Tullamore,Co. Offaly,,Ireland	KMK Metals Recycling Ltd,w0113-04,Tullamore,Co Offaly,,Ireland	

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility	Haz Waste : Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility	Haz Waste : Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used		Non-	Non Haz Waste: Address of Recover/Disposer				
Within the Country	20 01 38	No	879.88	wood other than that mentioned in 20 01 37	R3	M	Weighed	Offsite in Ireland	Clonmel Waste Disposal Ltd ,WP-008-02		Lawlessstown , Clonmel ,Co Tipperary , ,Ireland			
Within the Country	20 01 38	No	120.22	wood other than that mentioned in 20 01 37	R3	M	Weighed	Offsite in Ireland	Ormonde Organics Ltd,WFP-WD-10-0003-01		Killowen,Portlaw,Co. Waterford, ,Ireland			
Within the Country	20 01 39	No	569.09	plastics	R13	M	Weighed	Offsite in Ireland	Agnail ,TFS Broker IRE/AG117/11		,,,Ballycoolin,Dublin,Ireland			
To Other Countries	20 01 39	No	695.42	plastics	R13	M	Weighed	Abroad	Choice Waste Management,IRE/AG050/11		Denmark House,Brick Close Kiln Farm,Milton Keynes Buckinghamshire,MK11			
To Other Countries	20 01 39	No	102.76	plastics	R13	M	Weighed	Abroad	CKN Holdings,IRE/G415/16		3DP,United Kingdom			
Within the Country	20 01 39	No	11.62	plastics	R13	M	Weighed	Offsite in Ireland	Greentech Plastics Ltd,WFP-LK-2013-164		Castletroy ,Limerick, ,Ireland			
Within the Country	20 01 39	No	194.06	plastics	R13	M	Weighed	Offsite in Ireland	Leinster Environmentals,WP 2008/06		Park,Haggardstown,Dundalk, Co. Louth,Ireland			
Within the Country	20 01 39	No	283.58	plastics	R3	M	Weighed	Offsite in Ireland	Materia Environmental Ltd, ,IRE/AG161/11		The Kipper House,Scilly,Kinsale,Co. Cork,Ireland			
To Other Countries	20 01 39	No	41.94	plastics	R3	M	Weighed	Abroad	WRC Recycling,IRE/AG121/15		,,,Scotland,United Kingdom			
Within the Country	20 01 40	No	45.897	metals	R4	M	Weighed	Offsite in Ireland	Davis Recycling Ltd,W0134-01		10 The Anchorage Business Park,Charlotte Quay,Dublin 4, ,Ireland			
Within the Country	20 01 40	No	4.004	metals	R4	M	Weighed	Offsite in Ireland	Green Dragon Recycling Ltd,WFP-CK-10-0060-02		Caherlag,Glanmire,Co. Cork, ,Ireland			
Within the Country	20 01 40	No	62.94	metals	R4	M	Weighed	Offsite in Ireland	Davis Recycling Ltd,W0134-01		10 The Anchorage Business Park,Charlotte Quay,Dublin 4, ,Ireland			
Within the Country	20 01 40	No	21.02	metals	R4	M	Weighed	Offsite in Ireland	Multimetals Recycling Ltd,WFP-WW-13-0014-03		Murrough Industrial Estate,Bollorney,Wicklow,Co . Wicklow,Ireland			
Within the Country	20 01 40	No	11.6	metals	R4	M	Weighed	Offsite in Ireland	Molloy Metals,WP08/14b		Ballycarney,Enniscorthy,Co. Wexford, ,Ireland			
Within the Country	20 02 01	No	362.8	biodegradable waste	R3	M	Weighed	Offsite in Ireland	Clonmel Waste Disposal Ltd ,WP-008-02		Lawlessstown ,Clonmel ,Co Tipperary , ,Ireland			
Within the Country	20 03 01	No	1794.04	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Bord Na Mona,W0201-01		Drehid Landfill,Drehid ,Naas,Co. Kildare,Ireland			
Within the Country	20 03 01	No	46.7	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Glanway Ltd,WFP-KK-14-0002-01		Belview Port,Co. Kilkenny, ,Ireland			
Within the Country	20 03 01	No	666.08	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Gortnadroma Landfill ,W0017-03		Co. Limerick, , , ,Ireland			
Within the Country	20 03 01	No	465.99	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Starrus Eco Holdings Ltd,W0116-02		Six Cross Roads Business Park,Carriganard,Butlerstown, ,Waterford,Ireland			
Within the Country	20 03 03	No	99.78	street-cleaning residues	D5	M	Weighed	Offsite in Ireland	Bord Na Mona,W0201-01		Drehid Landfill,Drehid ,Naas,Co. Kildare,Ireland			
Within the Country	20 03 03	No	151.58	street-cleaning residues	D5	M	Weighed	Offsite in Ireland	Gortnadroma Landfill ,W0017-03		Co. Limerick, , , ,Ireland			
Within the Country	20 03 03	No	891.56	street-cleaning residues	R13	M	Weighed	Offsite in Ireland	Starrus Eco Holdings Ltd,W0053-03		Fassaroe,Bray,Co. Wicklow, ,Ireland			
Within the Country	20 03 07	No	68.56	bulky waste	R13	M	Weighed	Offsite in Ireland	Starrus Eco Holdings Ltd,W0053-03		Fassaroe,Bray,Co. Wicklow, ,Ireland			
Within the Country	20 03 07	No	22.56	bulky waste	R13	M	Weighed	Offsite in Ireland	Greenstar Limited,W0183-01		Millennium Business Park,Grange,Ballycoolin,Dublin 11,Ireland			

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

APPENDIX 2

Procedures List



Doc. No.: Control	Revision No.: As Shown	Issue Date: As Shown
Approved By:	Malcolm Dowling – Group Environmental Manager Oliver Callan – Group H&S Manager	Page 1 of 2

Integrated Procedures - IP

IP-01	Document & Record Control Procedure	Rev 01, 28/04/14
IP-02	Health & Safety Risk Assessment Procedure	Rev 01, 28/04/14
IP-03	Environmental Aspects & Impacts Procedure	Rev 01, 28/04/14
IP-04	Legal & Regulatory Requirements Procedure	Rev 01, 28/04/14
IP-05	Objectives, Targets & Management Programmes Procedure	Rev 01, 28/04/14
IP-06	Competence, Training & Awareness Procedure	Rev 01, 28/04/14
IP-07	Communication & Consultation Procedure	Rev 01, 28/04/14
IP-08	Monitoring, Measurement & Improvement Procedure	Rev 01, 28/04/14
IP-09	Evaluation of Compliance Procedure	Rev 01, 28/04/14
IP-10	Non Conformances, Corrective/Preventive Actions Procedure	Rev 01, 28/04/14
IP-11	Internal Audit Procedure	Rev 01, 28/04/14
IP-12	Management Review Procedure	Rev 01, 28/04/14
IP-13	Control of Contractors/Visitors Procedure	Rev 01, 28/04/14
IP-14	Health & Safety & Environmental Monitoring	Rev 01, 28/04/14
IP-15	Emergency Preparedness & Response Procedure	Rev 01, 28/04/14
IP-16	Fire Prevention Procedure	Rev 01, 28/04/14
IP-17	Bin Washing Procedure	Rev 01, 28/04/14

Safety Procedures - SP

SP-01	Permit to Work Procedure	Rev 01, 28/04/14
SP-02	Maintenance & Calibration Procedure	Rev 01, 28/04/14
SP-03	Mobile Plant Procedure	Rev 01, 28/04/14
SP-04	Fork Truck Procedure	Rev 01, 28/04/14
SP-05	Operation of Fixed Plant Procedure	Rev 01, 28/04/14
SP-06	Lock Out / Tag Out Procedure	Rev 01, 28/04/14
SP-07	Health & Safety Notification Procedure	Rev 01, 28/04/14
SP-08	MSW Shredder routine Maintenance & Clearing of Blockages Procedure (SCGT)	Rev 01, 28/04/14
SP-09	Weighbridge & Tipping Procedure (SCGT)	Rev 01, 28/04/14
SP-10	Cleaning of Washing Bay (Greenogue)	Rev 01, 28/04/14



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Environmental Procedures - EP

EP-01	Office Waste & Energy Management Procedure	Rev 01, 28/04/14
EP-02	Decommissioning and Aftercare Procedure	Rev 01, 28/04/14
EP-03	Environment Communications Procedure	Rev 01, 28/04/14
EP-04	Waste Permits & Licences Procedure	Rev 01, 28/04/14
EP-05	Waste Acceptance Procedure	Rev 01, 28/04/14
EP-06	Unacceptable Waste Procedure	Rev 01, 28/04/14
EP-07	Waste & Material Storage Procedure	Rev 01, 28/04/14
EP-08	Waste Processing Procedure	Rev 01, 28/04/14
EP-09	Site Infrastructure Procedure	Rev 01, 28/04/14
EP-10	Nuisance Management Procedure (Site Specific)	(Site Specific) Rev 01, 28/04/14
EP-11	Civic Amenity Site Procedure	Rev 01, 28/04/14