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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 2016 – DECEMBER 2016**

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# 1. INTRODUCTION

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This is the 2016 Annual Environmental Report (AER) for the Starrus Eco Holdings Ltd., (SEHL) Materials Recovery Facility (MRF) at Six Cross Roads Business Park, Waterford (W0177-03) and covers the reporting period January 2016 to December 2016. 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)<sup>1</sup>. Cognisance was also taken of the Agency AER Draft Guidance Document and AER Information Templates issued by the Agency in January 2012<sup>2</sup>.

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 EPA (Environmental Protection Agency) 1999 Waste Licensing – Draft Guidance on Environmental Management Systems and Reporting to the Agency

<sup>2</sup> EPA (Environmental Protection Agency) 2012 Draft AER Guidance Document

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## 2. SITE DESCRIPTION

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### 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 m<sup>2</sup> and is accessed through the Six Cross Roads Business Park. The western site boundary is a cul-de-sac, 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 SEHL 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. Hard plastics (PVC and Polypropylene) are shredded to form 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 in Table 2.1. The plant provides 100% duty and 50% standby for waste processing.

**Table 2.1** Plant List – 2016

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

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### 3. EMISSION MONITORING

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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 results are submitted to the Agency at quarterly intervals and an overview of the monitoring completed in 2016 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 approved the replacement of 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 in Tables 3.1 to 3.3. Due to dry conditions in some months no surface water samples were obtained. The results include the proposed warning and action levels developed by SEHL in Q1 2010. The warning level for Ammonia was exceeded at SW-5 on the 25<sup>th</sup> February, 29<sup>th</sup> February and 2<sup>nd</sup> August 2016. The action level for Conductivity was exceeded at SW-3 on the 29<sup>th</sup> February. The Agency and relevant authorities were notified of the exceedance of the action level.



**Table 3.1** Surface Water Monitoring Results – SW-3

Parameter	Units	25 <sup>th</sup> Feb	29 <sup>th</sup> Feb	1 <sup>st</sup> Apr	2 <sup>nd</sup> Aug	12 <sup>th</sup> Sept	14 <sup>th</sup> Dec	Warning Levels	Action Level
Ammonia	mg/l	0.09	0.19	0.07	0.13	0.16	0.12	2.0	4.4
Electrical Conductivity	mS/cm	0.179	0.888	0.084	0.150	0.159	0.281	0.466	0.774

**Table 3.2** Surface Water Monitoring Results SW-4

Parameter	Units	25 <sup>th</sup> Feb	29 <sup>th</sup> Feb	1 <sup>st</sup> Apr	2 <sup>nd</sup> Aug	12 <sup>th</sup> Sept	14 <sup>th</sup> Dec	Warning Levels	Action Level
Ammonia	mg/l	0.24	0.64	0.07	1.10	0.33	0.05	2.0	4.4
Electrical Conductivity	mS/cm	0.091	0.550	0.045	0.045	0.124	0.073	0.466	0.774

**Table 3.3** Surface Water Monitoring Results SW-5

Parameter	Units	25 <sup>th</sup> Feb	29 <sup>th</sup> Feb	1 <sup>st</sup> Apr	2 <sup>nd</sup> Aug	12 <sup>th</sup> Sept	14 <sup>th</sup> Dec	Warning Levels	Action Level
Ammonia	mg/l	2.36	2.59	0.64	3.92	1.05	0.06	2.0	4.4
Electrical Conductivity	mS/cm	0.303	0.141	0.160	0.123	0.124	0.395	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 Q1 2013.

The Agency amended the licence in Q1 2013 allowing an increase in the detergent ELV and the volume of waste water discharged to the sewer. The monitoring frequency was increased 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.

The discharge is rainfall dependent and due to dry conditions in some months no waste water samples were obtained.

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 3.4, which also includes the emission limit values (ELV) set in the Licence.

The ELV for the grab sample were not exceeded during any monitoring event in 2016.

**Table 3.4** Foul water Monitoring Results 2016

Parameter	Units	Jan	Feb	Mar	Apr	Jun	Sept	Dec	Emission Limit	Emission Limit (Grab Sample)*
pH	pH Units	6.80	6.80	6.09	6.55	6.69	6.63	7.28	6 – 9	6-9
BOD	mg/l	54	27	415	9	203	288	22	400	480
COD	mg/l	268	173	572	50	363	468	80	1,100	1,320
TSS	mg/l	353	101	138	128	87	117	87	300	360
Oils, Fats & Greases	mg/l	1.480	3.190	0.400	<0.01	<0.01	0.63	0.12	10	12
Surfactants (MBAS)	mg/l	1.5	0.9	0.5	0.8	0.4	2.7	2.0	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 it 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 3.5 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 August 2016. The monitoring carried out 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 3.5** Groundwater Monitoring Results – November 2016

Parameter	Units	BH-1	BH-3	GTV	IGV
BOD	mg/l	<1	<1	-	-
Dissolved Oxygen	mg/l	8	7	-	NAC
Oils, Fats & Greases	mg/l	<0.01	0.02	-	-
Total Phosphorus	mg/l	2435	481	-	-
Ammoniacal Nitrogen	mg/l	<0.03	<0.03	0.065 - 0.175	-
Conductivity	mS/cm	0.595	0.475	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	10469	2081	-	-

### 3.4 Noise Monitoring

The annual noise survey was conducted in October 2016. 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 3.6.

**Table 3.6** Noise Monitoring Results 2016

Station	Date	Time	Wind vector	L <sub>Aeq 30</sub> min dB	L <sub>AF10 30</sub> min dB	L <sub>AF90 30</sub> min dB	Specific L <sub>Aeq 30</sub> min dB
N1	04.10.16	1334-1404	+	66	67	56	66
	<p><b>Facility:</b> Occasional truck and plant movements on nearest yard and in nearest part of building dominant. Dust curtains blowing in breeze in 4 open roller shutter doors on adjacent building significant. Power washing operations at approx 40 m clearly audible. Occasional playback bird calls in adjacent building clearly audible.</p> <p><b>Extraneous:</b> Loudest vehicle movements in surrounding business park audible at low level. Distant road traffic continuously slightly audible.</p> <p><b>Specific L<sub>Aeq T</sub> determination:</b> L<sub>Aeq</sub> considered representative.</p>						
N2	04.10.16	1408-1438	0	67	68	55	67
	<p><b>Facility:</b> Occasional truck and plant movements on adjacent yard dominant when present. Inbuilding emissions not audible. Power washing at approx 100 m quite audible.</p> <p><b>Extraneous:</b> Regular emissions audible from various activities at commercial units outside boundary, including occasional forklift truck movements. Road traffic on bypass continuously quite audible.</p> <p><b>Specific L<sub>Aeq T</sub> determination:</b> Site emissions amplitude and frequency of occurrence sufficient to render L<sub>Aeq</sub> representative.</p>						
N3	04.10.16	1559-1629	+	53	56	49	<53
	<p><b>Facility:</b> Occasional truck movements near weighbridge area and intermittent plant operations in nearest building and yard zones quite audible.</p> <p><b>Extraneous:</b> R710 road traffic continuously clearly audible, dominating noise environment. Bird song/calls, aircraft, and lightly rustling vegetation.</p> <p><b>Specific L<sub>Aeq T</sub> determination:</b> Site emissions insufficient to affect L<sub>Aeq</sub>. Thus &lt;L<sub>Aeq</sub> determination possible only. L90 dominated by traffic.</p>						
NS1	04.10.16	1523-1553	+	57	60	49	<<49
	<p><b>Facility:</b> No emissions audible.</p> <p><b>Extraneous:</b> Intermittent passing traffic dominant when present. Distant traffic continuously audible at low level in several directions. Lightly rustling vegetation, bird song/calls, pedestrian and children voices in local area, and aircraft.</p> <p><b>Specific L<sub>Aeq T</sub> determination:</b> Inaudible, thus &lt;&lt;L90.</p>						
NS2	04.10.16	1446-1516	-	66	71	52	<<52
	<p><b>Facility:</b> No emissions audible.</p> <p><b>Extraneous:</b> Passing road traffic continuously audible and dominant. No other noise audible apart from crow calls.</p> <p><b>Specific L<sub>Aeq T</sub> determination:</b> Inaudible, thus &lt;&lt;L90.</p>						

**Specific L<sub>Aeq</sub>:** Level considered attributable to source under consideration, determined using real time assessment, field notes, time history profiles, statistical analysis, frequency spectra, spectral statistics and near field correction if applicable.

**Audibility scale:** Inaudible; faintly audible; slightly audible; audible at low level; quite audible; clearly audible; dominant; intrusive; excessive.

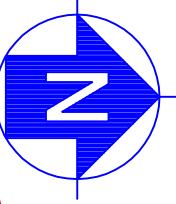
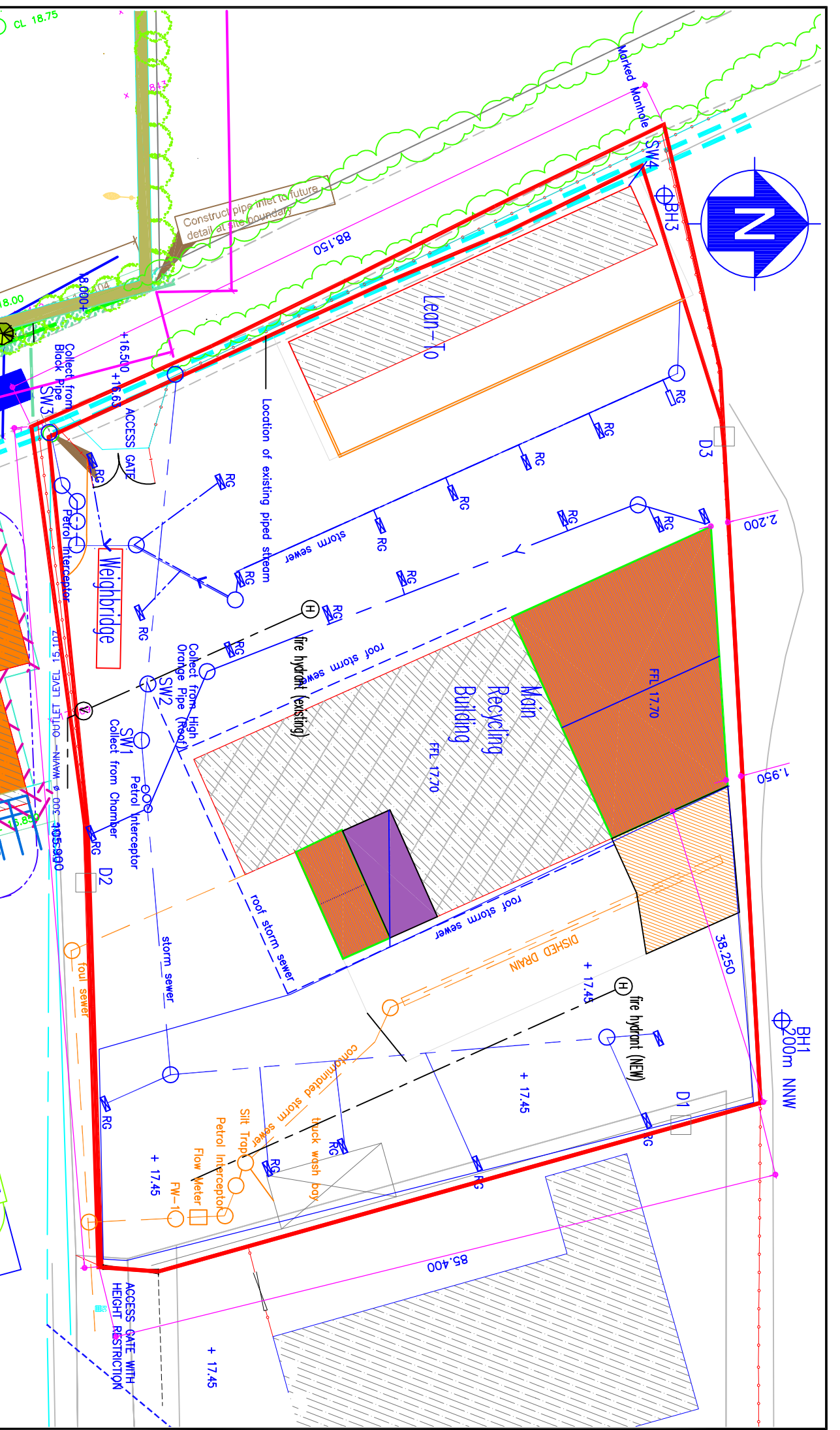
### 3.5 Dust Monitoring

Dust monitoring was carried out on three occasions at three on-site locations (D1, D2 and D3) in June, July and August 2016. The results of the monitoring are included on Table 3.7.

The dust emission limit (350 mg/m<sup>2</sup>/day) was exceeded at D3 in all monitoring events. On all occasions the laboratory noted the presence of a large amount of organic matter in the dust gauge, while the inorganic fraction, which is considered representative of site activities below the limit. No complaints relating to dust were received from neighbouring premises during the reporting period.

**Table 3.7** Dust Monitoring Results 2016

<b>Dust Emission (mg/m<sup>2</sup>/day)</b>	<b>June</b>	<b>July</b>	<b>August</b>	<b>Emission Limit</b>
<b>Sample Location</b>	<b>(30 days)</b>	<b>(30 days)</b>	<b>(30 days)</b>	<b>(mg/m<sup>2</sup>/day)</b>
<b>D1</b>	113	295	91	350
<b>D2</b>	265	316	269	350
<b>D3</b>	427	652	493	350



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CLIENT	Greenstar Environmental Services
TITLE	Monitoring Locations – Waterford

details

FIGURE No.	3.1
SCALE	NTS
REV.	A

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## 4. SITE DEVELOPMENT WORKS

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### 4.1 Engineering Works

The following works were carried out on site in 2016

- Upgrade of the onsite buildings
- Installation of second plastic granulator

The following works are proposed to be carried out in 2017:

- Upgrade of the onsite civic amenity site
- Further upgrade of the plastic granulator system.

### 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 2015.

**Table 4.1** Estimate of Resources Used On-Site in 2015 & 2016

Resources	Quantities 2015	Quantities 2016
Diesel (green)	54,998 litres	50,754 litres
Electricity	71,376 kWh	318,200 kWh
Hydraulic Oil	2,750 litres	1,950 litres
AdBlu Diesel Additive	2,220 litres	2,430 litres
Odour Neutraliser	0 litres	0 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.

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## **5. WASTE RECEIVED AND CONSIGNED FROM THE FACILITY**

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Table 5.1 shows the total quantities of waste received and consigned from the facility in 2016. 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. For comparative purposes the amounts of waste received and consigned from 2009 to 2016 are presented in Table 5.2.

The total quantity of waste received was 58,289 tonnes. The total waste consigned was 58,271 tonnes. The records show that more waste was accepted at the site than consigned. This is due to material being stored in the facility at the end of 2016 prior to consignment in Q1 2017. All the wastes consigned went to authorised recovery and disposal facilities approved by the Agency.



**Table 5.1** Waste Received & Consigned 2016

<b>EWC</b>	<b>Description</b>	<b>Waste In</b>	<b>Waste Out</b>
08 03 99	Cartridges	1.59	
12 12 02	Ferrous Metal Dust & Particles		18.42
15 01 01	Paper and cardboard packaging	6,510.483	5,538.17
15 01 02	Plastic packaging	3,429.072	437.38
15 01 03	Wooden packaging	8.7	41.82
15 01 04	Metallic packaging	0.99	
15 01 06	Mixed packaging		85.70
15 01 07	Glass packaging	116.25	445.10
17 01 01	Bricks	2.3	
17 05 04	Soil and stones	0.74	
17 08 02	Gypsum-based construction material	2.28	
17 09 04	Mixed C&D wastes	1,263.83	593.50
19 12 04	Plastic & Rubber		2,325.27
19 12 07	Shredded timber	1.78	1,702.80
19 12 09	Minerals	18.82	752.54
19 12 12	Other wastes (including mixtures of materials) from mechanical treatment of wastes	30.873	10,233.102
20 01 01	Paper & cardboard from municipal sources	1,475.355	2,070.76
20 01 02	Glass from municipal sources	409.12	
20 01 08	Biodegradable kitchen and canteen waste	3,566.982	3,378.35
20 01 11	Textile		1.26
20 01 35	WEEE		17.60
20 01 38	Wood waste from municipal sources	1,907.8	
20 01 39	Plastic from municipal sources	39.062	151.87
20 01 40	Metals from municipal waste	292.956	260.01
20 02 01	Biodegradable Waste	71.86	111.24
20 03 01	Mixed municipal waste	27,525.798	28,274.32
20 03 03	Street-cleaning residues	1,903.824	1,661.29
20 03 07	Bulky Waste	9,708.534	170.16
<b>Total Received</b>		<b>58,288.999</b>	
<b>Total Consigned</b>			<b>58,270.662</b>
<b>Recovery</b>			<b>55,877.602</b>
<b>Disposal</b>			<b>2,393.06</b>
<b>Recovery Rate</b>			<b>95.89%</b>

**Table 5.2** Waste Received & Consigned

<b>Year</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>
<b>Total Received</b>	46,718	38,532	55,232	54,627	57,592	49,011	48,560
<b>Total Consigned</b>	46,668	38,741	54,523	54,532	58,231	48,120	47,574
<b>Total Recovered</b>	45,081	36,013	43,092	43,101	44,517	25,706	20,892
<b>Total Disposed</b>	1,587	2,727	11,431	11,431	13,075	22,414	26,682
<b>Recovery Rate</b>	96%	93%	79%	79%	76%	53%	44%

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## **6. ENVIRONMENTAL INCIDENTS AND COMPLAINTS**

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### **6.1 Incidents**

There was one breach of the action level for conductivity at surface water monitoring location SW-3 on the 29<sup>th</sup> February 2016. There was one breach of the dust emission limit at D3 in July 2016. The Agency and County Council were notified where necessary of each incident.

### **6.2 Register of Complaints**

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

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## 7. ENVIRONMENTAL DEVELOPMENT & CONTROL

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### 7.1 Environmental Management Programme Report

SEHL 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. SEHL 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 2016 (Table 7.1), as well as the proposed Objectives and Targets for 2017 (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:** 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:** Over 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.

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

### 7.1.2 *Staff Training*

The following staff training was carried out during the year manual handling, reversing, tachograph training, Moffet training, forklift training, loading shovel training, driver assessor training, fire warden training and first aid training. 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 2016*

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

### 7.2.2 *Schedule of Objectives 2017*

The schedule of targets and objectives for 2017 are presented in Table 7.2.

## 7.3 **Communications Programme**

SEHL is committed to setting the standard in waste management and ensuring environmental compliance in all operations. In addition, SEHL'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 SEHL 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.

**Table 7.1 Objectives and Targets for 2016**

No	2016 Objective	Target	Timescale	Responsibility	Status
1	<b>Increase awareness of Odour Management on site group wide</b>	Specify Odour detection in Site Inspection Database (EF-10A) on a daily basis and generate actions as appropriate	Q1-Q2	Site Management/ EHS	Ongoing
2	<b>Waste storage practices</b>	Review waste storage practices on each site to ensure that they are in line with licence conditions, fire prevention and insurance recommendations	Q2	Site Management/ EHS	Ongoing
3	<b>Emergency response procedures - ER pack update</b>	Review the Emergency Response Pack on each site and ensure that all information & equipment required in case of an emergency is available. Confirm that relevant staff training adequately addresses.	Q2	Site Management/ EHS	Ongoing
4	<b>CRAMP, ELRA &amp; Financial Provision</b>	CRAMP, ELRA & Financial Provision to be reviewed	Q2/Q3	EHS team	Q4 2016
5	<b>Waste acceptance, classification &amp; records</b>	EWC training for all weighbridge ops. Centralisation of all licences & permits inc NWCPs for hauliers.	Q2/Q3	EHS team	Ongoing

**Table 7.2 Schedule of Objective and Targets 2017**

<b>No</b>	<b>2017 Objective</b>	<b>Target</b>	<b>Timescale</b>	<b>Responsibility</b>
<b>1</b>	<b>Odour management</b>	Ensure odour management plans are followed and potential new sources of odour are identified	Q1 - Q4	Site management
<b>2</b>	<b>Fire prevention</b>	Implement recs from Fire Risk Assessments Update ERP & APP Maintain fire detection equipment	Q1 - Q4	Site management/EHS team
<b>3</b>	<b>Waste storage</b>	Review waste storage practices on each site to ensure that they are inline with licence conditions, fire prevention and insurance recommendations	Q1 - Q4	Site management/EHS team
<b>4</b>	<b>Waste acceptance, classification &amp; records</b>	EWC training for all weighbridge ops. Centralisation of all licences & permits inc NWCPs for hauliers.	Q1 - Q4	EHS team
<b>5</b>	<b>CRAMP, ELRA &amp; Financial Provision</b>	CRAMP, ELRA & Financial Provision to be reviewed	Q2	EHS team
<b>6</b>	<b>Lighting in MRF buildings</b>	Clean & upgrade where required all light fittings in MRF buildings	Q3	Site management
<b>7</b>	<b>NWCP exemptions</b>	Implement NWCP exemption declarations	Q1 - Q4	Site management
<b>8</b>	<b>Pipeline integrity Testing</b>	Complete pipeline integrity testing	Q1/Q2	Site management

## **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. SEHL also implements a comprehensive monitoring programme which will highlight any potential environmental incidents with the potential to cause environmental damage.

## **7.5 Nuisance Controls**

SEHL 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 925 m<sup>3</sup>



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## **8. OTHER REPORTS**

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### **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 return submitted to the Agency via the web-based data reporting system is in Appendix 1.

# **APPENDIX 1**

European Pollutant Release and Transfer Register



Environmental Protection Agency

| PRTR# : W0177 | Facility Name : Starrus Eco Holdings Limited (Waterford City) |  
 Filename : W0177\_2016.xls | Return Year : 2016 |

[Guidance to completing the PRTR workbook](#)

# PRTR Returns Workbook

Version 1.1.19

<b>REFERENCE YEAR</b>	2016
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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
<b>AER Returns Contact Name</b>	Sara Smyth
<b>AER Returns Contact Email Address</b>	sara.smyth@greenstar.ie
<b>AER Returns Contact Position</b>	Environmental Engineer
<b>AER Returns Contact Telephone Number</b>	01 2746236
<b>AER Returns Contact Mobile Phone Number</b>	
<b>AER Returns Contact Fax Number</b>	
<b>Production Volume</b>	0.0
<b>Production Volume Units</b>	
<b>Number of Installations</b>	0
<b>Number of Operating Hours in Year</b>	0
<b>Number of Employees</b>	51
<b>User Feedback/Comments</b>	
<b>Web Address</b>	

## 2. PRTR CLASS ACTIVITIES

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

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

Is it applicable?	
Have you been granted an exemption ?	
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

## 4. 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) ?	
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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\_2016.xls | Return Year : 2016 |

31/03/2017 08:59

**SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS**

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

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

**SECTION B : REMAINING PRTR POLLUTANTS**

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

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

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

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

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

**Additional Data Requested from Landfill operators**

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

Landfill: 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\_2016.xls | Return Year : 2016 |

31/03/2017 09:00

**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 it

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

31/03/2017 09:00

**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\_2016.xls | Return Year : 2016 |

31/03/2017 09:01

SECTION A : PRTR POLLUTANTS

POLLUTANT		RELEASERS 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		RELEASERS 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\_2016.xls | Return Year : 2016 |

31/03/2017 09:01

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	Licence/Permit No of Next Destination Facility		Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)	
						M/C/E	Method Used		Haz Waste: Name and Licence/Permit No of Recover/Disposer	Non-Haz Waste: Address of Recover/Disposer			
Within the Country	12 01 02	No	18.42	ferrous metal dust and particles	R4	M	Weighed	Offsite in Ireland	Cork Metal Company,WFP-CK-10-0067-01	Dublin Hill,Cork,,,,Ireland Millennium Business Park,Grange,Ballycoolin,Dublin 11,Ireland			
Within the Country	15 01 01	No	117.8	paper and cardboard packaging	R3	M	Weighed	Offsite in Ireland	Starrus Eco Holding Ltd.,W0183-01	Ballymount Road,Walkinstown,Dublin 12,,Ireland			
To Other Countries	15 01 01	No	103.58	paper and cardboard packaging	R3	M	Weighed	Abroad	Irish Packaging & Recycling,W0263-01	Veeplaat 40,3313 LJ Dordrecht,,,,Netherlands			
To Other Countries	15 01 01	No	51.14	paper and cardboard packaging	R3	M	Weighed	Abroad	Peute Papier Recycling BV,IRE/G006/08	Saica natur Uk Ltd,IRE/G277/15	.....,United Kingdom Ballymount Road,Walkinstown,Dublin 12,,Ireland		
Within the Country	15 01 02	No	25.12	plastic packaging	R3	M	Weighed	Offsite in Ireland	Irish Packaging & Recycling,W0263-01	Agnail ,TFS Broker IRE/AG117/11	....,Ballycoolin,Dublin,Ireland		
To Other Countries	15 01 02	No	103.22	plastic packaging	R3	M	Weighed	Abroad	Peute Papier Recycling BV,IRE/G006/08	Clermont Business Park,Haggardstown,Dundalk ,Co. Louth,Ireland			
To Other Countries	15 01 02	No	153.76	plastic packaging	R3	M	Weighed	Abroad	Leinster Environmentals,WFP 2008/06	The Kipper House,Scilly,Kinsale,Co. Cork,Ireland			
Within the Country	15 01 02	No	108.82	plastic packaging	R13	M	Weighed	Offsite in Ireland	Materia Environmental Ltd.,IRE/AG161/11	Millennium Business Park,Grange,Ballycoolin,Dublin 11,Ireland			
Within the Country	15 01 03	No	41.82	wooden packaging	R13	M	Weighed	Offsite in Ireland	Starrus Eco Holding Ltd.,W0183-01	Aughacurreen,Killarney ,Co. Kerry,,Ireland			
Within the Country	15 01 06	No	85.7	mixed packaging	R13	M	Weighed	Offsite in Ireland	Killarney Waste Disposal ,W0217-01	Lawlesstown ,Clonmel ,Co Tipperary ,,ireland			
Within the Country	15 01 07	No	432.42	glass packaging	R13	M	Weighed	Offsite in Ireland	Clonmel Waste Disposal Ltd ,WP-008-02	Gannon Eco,WFP-WM-2009-0007-01	Ballingore,Co. Westmeath,,,,Ireland		
Within the Country	15 01 07	No	12.68	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	CHI Environmental Ltd ,WMP 023/2007	Agnail ,TFS Broker IRE/AG117/11	Grannagh ,Kilmacow ,Co Kilkenny ,,ireland		
Within the Country	17 09 04	No	593.5	plastic and rubber	R13	M	Weighed	Offsite in Ireland	Greentech Plastics Ltd,WFP-LK-2013-164	WRC	.....,Scotland,United Kingdom		
Within the Country	19 12 04	No	890.79	plastic and rubber	R3	M	Weighed	Offsite in Ireland	Clonmel Waste Disposal Ltd ,WP-008-02	CHI Environmental Ltd ,WMP 023/2007	Grannagh ,Kilmacow ,Co Kilkenny ,,ireland		
Within the Country	19 12 04	No	103.02	plastic and rubber	R3	M	Weighed	Offsite in Ireland	Ormonde Organics Ltd,W0287-01	Killowen,Portlaw,Co. Waterford,,Ireland			
To Other Countries	19 12 04	No	317.38	plastic and rubber	R13	M	Weighed	Abroad	Oxigen Environmental Ltd.,W0152-03	Starrus Eco Holdings Ltd,W0053-03	Fassaroe,Bray,Co. Wicklow,,Ireland		
Within the Country	19 12 07	No	1558.1	wood other than that mentioned in 19 12 06	R13	M	Weighed	Offsite in Ireland					
Within the Country	19 12 09	No	752.54	minerals (for example sand, stones)	R13	M	Weighed	Offsite in Ireland					
Within the Country	19 12 07	No	26.58	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	R3	M	Weighed	Offsite in Ireland					
Within the Country	19 12 12	No	2430.94	11 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					
Within the Country	19 12 12	No	7771.142	11 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					

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Licence/Permit No of Next Destination Facility		Name and License / Permit No. and Address of Final Recycler / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used		Haz Waste: Name and Licence/Permit No of Recover/Disposer	Non Haz Waste: Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer		
				other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12								
Within the Country	19 12 12	No	1.9 11		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	192.64	paper and cardboard	R3	M	Weighed	Offsite in Ireland	Shred It Ireland,.,	Millennium Business Park,Grange,Ballycoolin,Dublin 11,Ireland		
Within the Country	20 01 01	No	50.74	paper and cardboard	R13	M	Weighed	Offsite in Ireland	Starrus Eco Holding Ltd.,W0183-01	Ballymount Road,Walkinstown,Dublin 12.,Ireland		
Within the Country	20 01 01	No	668.82	paper and cardboard	R13	M	Weighed	Offsite in Ireland	Irish Packaging & Recycling,W0263-01			
To Other Countries	20 01 01	No	75.06	paper and cardboard	R3	M	Weighed	Abroad	MLM (ACN Europe) Ltd ,TFS Broker IRE/G022/11	.....,United Kingdom		
To Other Countries	20 01 01	No	1058.32	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	788.7	biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	Ormonde Organics Ltd,WFP-WD-10-0003-01	Killowen,Portlaw,Co. Waterford,.,Ireland		
Within the Country	20 01 08	No	2589.65	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	1.26	textiles discarded electrical and electronic equipment other than those mentioned in 20 01 21 and and 20 01 23 containing	R13	M	Weighed	Offsite in Ireland	Textile Recycling Ltd ,Licence exempt	Belgard ,Tallaght , Dublin 24 ,Ireland		
Within the Country	20 01 35	Yes	17.6	hazardous components	R4	M	Weighed	Offsite in Ireland	KMK Metals Recyclin LTD,W0113-04	Tullamore,Co. Offaly,.,Ireland	KMK Metals Recycling Ltd,w0113-04,Tullamore,Co Offaly,.,Ireland	.....,Ireland
Within the Country	20 01 39	No	65.65	plastics	R13	M	Weighed	Offsite in Ireland	Agnail ,TFS Broker IRE/AG117/11	.....,Ballycoolin,Dublin,Ireland		
Within the Country	20 01 39	No	42.38	plastics	R13	M	Weighed	Offsite in Ireland	Greentech Plastics Ltd,WFP-LK-2013-164	Castletroy ,Limerick,.,Ireland		
To Other Countries	20 01 39	No	43.84	plastics	R13	M	Weighed	Abroad	Boost Recycling Limited,IRE/G082/11	.....,United Kingdom		
Within the Country	20 01 40	No	106.85	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	1.24	metals	R4	M	Weighed	Offsite in Ireland	KMK Metals Recyclin LTD,W0113-04	Tullamore,Co. Offaly,.,Ireland		
Within the Country	20 01 40	No	11.92	metals	R4	M	Weighed	Offsite in Ireland	Clearcircle Metals,WCP-LK-08-589-01	Road,Limerick,Co. Limerick,.,Ireland		
Within the Country	20 01 40	No	135.5	metals	R4	M	Weighed	Offsite in Ireland	Multimetals Recycling Ltd,WFP-WW-13-0014-03	Murrough Industrial Estate,Bollarny,Wicklow,Co . Wicklow,Ireland		
Within the Country	20 01 40	No	4.5	metals	R4	M	Weighed	Offsite in Ireland	Molloy Metals,WP08/14b	Ballycarney,Enniscorthy,Co. Wexford,.,Ireland		
Within the Country	20 02 01	No	14.06	biodegradable waste	R3	M	Weighed	Offsite in Ireland	Clonmel Waste Disposal Ltd ,WP-008-02	Lawlesstown ,Clonmel ,Co Tipperary ,Ireland		
Within the Country	20 03 01	No	22.34	mixed municipal waste	R1	M	Weighed	Offsite in Ireland	Indaver Ireland Ltd.,W0167-03	Carranstown,Duleek,Co. Meath,.,Ireland		
Within the Country	20 03 01	No	20459.93	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	3834.79	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Starrus Eco Holdings Ltd,W0053-03	Fassaroe,Bray,Co. Wicklow,.,Ireland		
Within the Country	20 03 01	No	119.3	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 01	No	165.5	mixed municipal waste	R3	M	Weighed	Offsite in Ireland	Killarney Waste Disposal ,W0217-01	Aughacurreen,Killarney ,Co. Kerry,.,Ireland		

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Licence/Permit No of Next Destination Facility Haz Waste: Name and Licence/Permit No of Recover/Disposer Non-Haz Waste: Address 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	20 03 01	No	2026.68	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Knockharley Landfill,W0146-02	Knockharley ,Navan,Co. Meath,,Ireland		
Within the Country	20 03 01	No	940.6	mixed municipal waste	R3	M	Weighed	Offsite in Ireland	Quality Recycling Ltd.,WFP-TS-08-0079-01	Ballylynch,Carrick-on-Suir,Co. Tipperary,,Ireland		
Within the Country	20 03 01	No	607.8	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Oxigen Environmental Ltd.,W0152-03	Road,Ballymount,Dublin 22,Ireland		
Within the Country	20 03 01	No	72.16	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Bord Na Mona,W0201-01	,Naas,Co. Kildare,Ireland		
Within the Country	20 03 03	No	294.22	street-cleaning residues	D5	M	Weighed	Offsite in Ireland	Knockharley Landfill,W0146-02	Knockharley ,Navan,Co. Meath,,Ireland		
Within the Country	20 03 03	No	1367.07	street-cleaning residues	R13	M	Weighed	Offsite in Ireland	Starrus Eco Holdings Ltd,W0053-03	Fassaroe,Bray,Co. Wicklow,,Ireland		
To Other Countries	19 12 04	No	265.24	plastic and rubber	R13	M	Weighed	Abroad	Boost Recycling Limited,IRE/G082/11		.....,United Kingdom	
To Other Countries	19 12 04	No	41.5	plastic and rubber	R13	M	Weighed	Abroad	Choice Waste Management,IRE/AG050/11		Denmark House,Brick Close Kiln Farm,Milton Keynes Buckinghamshire,MK11 3DP,United Kingdom	
Within the Country	19 12 04	No	520.9	plastic and rubber	R13	M	Weighed	Offsite in Ireland	Leinster Environmentals,WP 2008/06	Park,Haggardstown,Dundalk ,Co. Louth,Ireland		
Within the Country	19 12 04	No	186.44	plastic and rubber	R13	M	Weighed	Offsite in Ireland	Materia Environmental Ltd.,IRE/AG161/11	The Kipper House,Scilly,Kinsale,Co. Cork,Ireland		
To Other Countries	20 01 01	No	25.18	paper and cardboard	R13	M	Weighed	Abroad	Saica natur Uk Ltd,IRE/G277/15		.....,United Kingdom	
Within the Country	20 02 01	No	97.18	biodegradable waste other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12	R13	M	Weighed	Offsite in Ireland	Starrus Eco Holding Ltd.,W0183-01		Millennium Business Park,Grange,Ballycoolin,Dublin 11,Ireland	
Within the Country	19 12 12	No	29.12	11	R13	M	Weighed	Offsite in Ireland	Nurendale Ltd.,W0039-02		Ballymount Cross,Tallaght,Dublin 24,,Ireland	
Within the Country	20 03 07	No	27.18	bulky waste	R13	M	Weighed	Offsite in Ireland	Nurendale Ltd.,W0039-02		Ballymount Cross,Tallaght,Dublin 24,,Ireland	
Within the Country	20 03 07	No	101.9	bulky waste	R13	M	Weighed	Offsite in Ireland	Nurendale Ltd.,W0140-04		Rathdrinagh,Beauparc,Navan,Co. Meath,Ireland	
Within the Country	19 12 07	No	118.12	wood other than that mentioned in 19 12 06	R13	M	Weighed	Offsite in Ireland	Starrus Eco Holdings Ltd,W0053-03	Fassaroe,Bray,Co. Wicklow,,Ireland		
<b>Within the Country</b>	<b>20 03 01</b>	<b>No</b>	25.22	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Starrus Eco Holdings Ltd.,W0082-03	Dock Road,Limerick,Co. Limerick,,Ireland		
Within the Country	20 03 07	No	41.08	bulky waste	R13	M	Weighed	Offsite in Ireland	Murray Waste Recycling Ltd.,W0258-01		Coolatore,Ferns,Co. Wexford,,Ireland	

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

## **APPENDIX 2**

Procedures List



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**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 02, 21/01/16
IP-06	Competence, Training & Awareness Procedure	Rev 01, 28/04/14
IP-07	Communication & Consultation Procedure	Rev 02, 21/01/16
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 02, 21/01/16
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
IP-18	Accident Prevention Procedure	Rev 02, 14/11/16
IP-19	Fuel Procedure for Tanks & Mobile Plant	Rev 01, 11/01/17

**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 02, 06/05/15
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

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**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	IP-06	02	Addressing Agency Staff needs	M.D & O.C
01.02.11	13	Circ List	02	Amendment to document control	M.D & O.C
04.04.11	14	SP-02	03	Inclusion of Site Specific Maintenance schedules	O.C
07.06.11	15	IP-11	02	Inclusion of H&S & Env Internal Audit Schedules	M.D & O.C
14/09/11	16	EP-02	02	Inclusion of decommissioning of plant/equipment	S.B
15/09/11	17	IP-09	02	Inclusion of Statutory Inspections	O.C
01/12/11	18	SP-09	01	Inclusion of new procedure for SCGT	O.C
01/12/11	19	SP-10	01	Inclusion of new procedure for SCGT	O.C
03/05/12	20	SP-01	02	Amendment to remove SF 028	O.C
05/05/12	21	SP-11	01	Inclusion of a new procedure for Greenogue	O.C
28/05/12	22	IP-11	03	General Amendments to internal audit procedure	M.D & O.C
08/06/12	23	IP-13	03	Grammatical amendment	M.D & O.C
15/04/13	24	IP-06	03	Agency staff – sign-off record sufficient proof of training. TMS optional	M.D & O.C



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Date	Amendment No.	Procedure No:	Revision No:	Comment	Authorised By
30/06/13	25	IP-16	01	Inclusion of new procedure	M.D.
09/09/13	26	IP-03	02	Use of Scannell Software Solutions (EnviroManager) instead of IF-03A	M.D & O.C
09/09/13	27	IP-04	30	Use of Scannell Software Solutions (EnviroManager) instead of IF-03A	M.D & O.C
09/09/13	28	IP-05	02	Use of Scannell Software Solutions (EnviroManager) instead of IF-03A	M.D & O.C
16/10/13	29	EP-03	03	Introduction of EPA ALDER Portal	K.B
28/04/14	30	All EP's & IP's	01	Change of Company name and review of all Integrated and Env procedures	M.D & O.C
28/04/14	31	SP's	01	Change of Company name and review of all safety procedures including re-numbering & deletion of Motor Claim Notification Procedure – SP 08	O.C
06/05/15	32	EP-09	02	Ref to new form EF-11 added	SS
21/01/16	33	IP-05/IP-07/IP-12	02	Meeting frequency refs updated	SS
14/11/16	34	IP-18	02	Amended as per EPA instruction	SS
11/01/17	35	IP-19	01	New addition	SS





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