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ANNUAL ENVIRONMENTAL REPORT

STARRUS ECO HOLDINGS LTD

SIX CROSS ROADS, WATERFORD

LICENCE NO. W0116-02

JANUARY 2014 – DECEMBER 2014

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Project		Annual Environmental Report 2014		
Client		Starrus Eco Holdings Ltd. W0116-02		
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1. INTRODUCTION

This is the 2014 Annual Environmental Report (AER) for the Starrus Eco Holding Ltd. (Greenstar) Materials Recovery Facility (MRF) at Six Cross Roads, Butlerstown, County Waterford. The report covers the period from the 1st January 2014 to the 31st December 2014.

In 2014, the facility recommenced the acceptance of waste after a period of closure during 2012 and 2013 when the facility was non-operational. During the closure period the facility was mainly used for the storage of empty skips and bins.

In November 2013 notification was received from the Agency of conditional approval relating to the re-commencement of waste management activity at the facility. Significant works were undertaken in advance of the January 2014 opening date such as electrical and mechanical repair work including the re-instatement of the weighbridge electrics at the facility and repairs to damaged infrastructure. The licence monitoring programme was also re-instated prior to the re-opening, having been temporarily suspended with the agreement of the Agency during the period of closure.

Greenstar had previously submitted a request to the Agency to allow for the installation of equipment at the facility to allow for the baling and wrapping of MSW. Approval of the baling operation was granted in November 2013 and the facility commenced operations in early January 2014.

The content of the AER is based on Schedule F of the Waste Licence (W0116-02) and the report format follows guidelines set in the “*Guidance Note for Annual Environmental Report*” issued by the Environmental Protection Agency (Agency)¹. Cognisance was also taken of the AER Draft Guidance Document issued in January 2012².

¹ EPA (Environmental Protection Agency) 1999 Waste Licensing – Draft Guidance on Environmental Management Systems and Reporting to the Agency

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

2. SITE DESCRIPTION

2.1 Site Location and Layout

The facility is located at Six Cross Roads, Carriganard, Butlerstown and is accessible from the Six Cross Roads, just south of the Waterford by-pass (R710). The surrounding area to the north, south and east of the facility is occupied by industrial and commercial premises. The facility is bordered to the west by a third class road and agricultural land.

The waste processing building which houses the baler is located in the eastern section of the site. The baled materials is stored on the hard standing within the waste processing building and on the external paved section along the northern boundary of the site. The runoff from the areas used to store the bales is diverted by the waste water drainage system to an underground tank. The weighbridge and site office are located to the east of the yard.

2.2 Waste Management Activities

The licence allows Greenstar to accept and process 70,000 tonnes of waste per annum, comprising commercial/industrial non-hazardous waste, household waste, and construction and demolition wastes.

While the facility has not accepted municipal waste since October 2010, a small amount of gypsum waste was temporarily stored inside the transfer station building between January and July 2011. This temporary storage was agreed with the Agency. In 2012 and 2013, the facility was non-operational and, with Agency agreement, was used for the storage of empty skips and bins. The Agency was informed that activity at the facility would be limited to baling, wrapping and temporary storage of MSW and it was confirmed that there were no plans to re-activate the civic amenity operation at the site as this operation has been successfully transferred to the nearby facility (W0177-03). In January 2014, the facility recommenced the acceptance of waste.

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 (30,000 tonnes)
- Industrial Non-Hazardous Solid (20,000 tonnes)
- Construction & Demolition (20,000 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 process carried out at the facility in 2014 involved: -

The use of a mobile baling and wrapping system within the waste transfer building that comprises the following elements;

- In-feed Conveyor
- Bale Chamber
- Wrapping Unit
- Bale Conveyor

The process to create wrapped, baled RDF is described below.

The Baling Process

The baler is located within the MSW transfer shed. Suitable feedstock material (MSW – EWC 20 03 01) is subjected to a basic pre-pick using an articulated grab to remove any large pieces of material. Waste material is then fed into a bale chamber via an in-feed conveyor. In the chamber, material is rotated around the axis of the chamber and as more material is fed in, bale compression increases and the bale becomes evenly firm and stable. A computer system monitors the compression by measuring the hydraulic pressure in the system and the compression level required is set by the operator in advance via the computerised system.

When the required chamber pressure is reached, a net is wound around the bale. This ensures that the bale keeps its form and prevents the compressed material from expanding when the chamber is opened. The netting is fed into the chamber by means of jet air nozzles and again the process is controlled by the operator in that the operator specifies the number of windings of the net and the computer system checks continuously that the net is properly fed.

The bale is then transferred to the wrapping unit. The baling chamber opens and the heads of the chamber are pressed towards each circular end of the bale to hold it firmly during the transfer to the wrapping unit.

The bale is wrapped with a thin, strong and stretchable plastic film that is airtight and water resistant. The wrapping is put in place by means of a sweep arm that rotates on the wrapping

table to give 50% overlap of film on bale. While wrapping is occurring at one end, the heads of the bale chamber return to the baling position. The bale chamber closes and new material is fed into the baler.

When wrapping is completed, the film is cut and the bale is loaded into the bale conveyor.

The wrapped bale is tilted onto the bale conveyor for unloading to storage (pending off-site transportation). Bales are mainly stored externally (subject to conditions in terms of retention time and number of bales).

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	Excavating grab	Caterpillar 312	150	100
2	Teleporter	JCB 536/60	2t	
3	Road Sweeper	Iveco 180E23	500 lts	
4	Waste Baler	Flexus Tornado Helicopter 202/205	25T/hour	

3. EMISSION MONITORING

The monitoring specified in the licence includes surface water, dust and noise monitoring. The monitoring locations are shown on Figure 3.1. The surface water monitoring results are included in reports submitted to the Agency at quarterly intervals. The dust monitoring results are reported to the agency bi-annually and an annual noise report is submitted to the agency. An overview of the monitoring completed in 2014 is presented in this section.

3.1 Surface Water Monitoring

Surface water monitoring is carried out at three locations (SW-1, SW-2 and SW-3). Rainwater run-off from the site discharges to a culverted stream on the eastern side of the access road (cul de sac). The receiving stream runs from the New Ring Road to the Six Cross Roads and is culverted from the start of the industrial estate to the Six Cross Roads.

The monitoring locations include the surface water discharge point and up and downstream of the discharge, as shown on Figure 3.1. SW-1 is to the north and upstream of the facility. SW-2 is at the discharge point and SW-3 is to the south and downstream, where the stream is not culverted. This is the closest accessible downstream location.

The samples, collected by Greenstar staff, were analysed for the quarterly parameters specified in Schedule C of the Licence. The methodologies were all ISO/CEN approved or equivalent and the method detection limits were lower than the proposed trigger levels for the discharge. The results were all less than the proposed trigger levels.

Table 3.1 Surface Water Monitoring Results – Q1 2014

Parameter	Units	SW-1 Upstream	SW-2* Discharge	SW-3 Downstream	Proposed Trigger Level*
pH	pH units	6.91	7.05	7.23	5.5 – 9.0
Conductivity	mS/cm	0.355	0.259	0.546	1.000
COD	mg/l	10	33	166	40
Total Ammonia	mg/l	0.09	0.39	2.85	3.78
Suspended Solids	mg/l	11	191	695	-
Mineral Oils	mg/l	<0.01	<0.01	<0.01	-

* The Trigger levels only apply to the discharge point SW-2

Table 3.2 Surface Water Monitoring Results – Q2 2014

Parameter	Units	SW-1 Upstream	SW-2* Discharge	SW-3 Downstream	Proposed Trigger Level*
pH	pH units	7.05	6.81	6.85	5.5 – 9.0
Conductivity	mS/cm	0.155	0.167	0.207	1.000
COD	mg/l	18	20	25	40
Total Ammonia	mg/l	0.17	1.96	1.37	3.78
Suspended Solids	mg/l	23	11	24	-
Mineral Oils	mg/l	<0.01	<0.01	<0.01	-

* The Trigger levels only apply to the discharge point SW-2

Table 3.3 Surface Water Monitoring Results – Q3 2014

Parameter	Units	SW-1 Upstream	SW-2* Discharge	SW-3 Downstream	Proposed Trigger Level*
pH	pH units	7.29	6.97	7.04	5.5 – 9.0
Conductivity	mS/cm	0.184	0.117	0.325	1.000
COD	mg/l	34	21	68	40
Total Ammonia	mg/l	0.17	1.27	1.72	3.78
Suspended Solids	mg/l	49	10	30	-
Mineral Oils	mg/l	<0.01	<0.01	<0.01	-

* The Trigger levels only apply to the discharge point SW-2

Table 3.4 Surface Water Monitoring Results – Q4 2014

Parameter	Units	SW-1 Upstream	SW-2* Discharge	SW-3 Downstream	Proposed Trigger Level*
pH	pH units	7.47	7.20	7.10	5.5 – 9.0
Conductivity	mS/cm	0.138	0.074	0.329	1.000
COD	mg/l	15	<7	25	40
Total Ammonia	mg/l	0.08	0.56	0.08	3.78
Suspended Solids	mg/l	<10	<10	<10	-
Mineral Oils	mg/l	<0.01	<0.01	<0.01	-

* The Trigger levels only apply to the discharge point SW-2

3.2 Noise Monitoring

The licence requires bi-annual noise surveys to be completed. The monitoring locations include three boundary locations (N1 – N3) and two off site noise sensitive locations (N4 and N5). 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. The first noise survey was conducted in June and the second was conducted in September. A summary of the noise results is shown in Tables 3.5 and 3.6.

Table 3.5 Noise Monitoring Results June 2014

Station	Time	L _{Aeq 30} min dB	L _{AF10 30} min dB	L _{AF90 30} min dB	Specific level* dB	Noise audible
N1	1200-1230	72	76	63	72	Loaders and clamp truck operating continuously on yard dominant, in addition to occasional truck movements, particularly when idling on weighbridge near N1. No other noise audible.
N2	1233-1303	70	73	65	70	N2 (relocated 10 m E to avoid bale loading operation) Loaders and clamp truck operating continuously on yard dominant, in addition to occasional truck movements. No other noise audible.
N3	1129-1159	71	73	68	71	Loaders and clamp truck operating continuously on yard dominant, in addition to occasional truck movements, particularly idling truck at 10 m 1134-1140. No other noise audible.
N4	1312-1342	53	55	41	<41	Site emissions inaudible. Intermittent road traffic through adjacent junction dominant when present. Distant traffic on junction approaches and on bypass almost continuously audible. Crows significant. Birdsong and aircraft.
N5	1348-1418	65	67	39	<39	Site emissions inaudible. Intermittent passing traffic dominant when present. Distant traffic on bypass almost continuously audible. Crows significant. Birdsong and aircraft.

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

Table 3.6 Noise Monitoring Results September 2014

Station	Time	L _{Aeq} 30 min dB	L _{AF10} 30 min dB	L _{AF90} 30 min dB	Specific level* dB	Noise audible
N1	0818-0848	60	63	53	60	Telescopic loader continuously operating in building and around yard dominant. Excavator and baling plant in building also slightly audible. No other noise audible.
N2	0849-0919	73	75	68	70	Relocated close to building entrance due to stacked bales all along N wall, 1 m from bales for safety reasons. Telescopic loader continuously operating in building and around yard dominant. Excavator and baling plant in building also clearly audible. No other noise audible.
N3	0922-0952	69	72	57	69	Yard sweeper truck arrived shortly after interval start, dominating noise environment from 0940. No other noise audible. Prior to 0940, loader, excavator and bale wrapping emissions continuously dominant.
N4	0957-1027	51	55	40	<40	No site emissions audible. Intermittent traffic through adjacent road junction dominant when present. Distant traffic continuously audible at low level on bypass route. Crows and birdsong significant. Aircraft. Local cars x2.
N5	1034-1104	64	65	41	<41	No site emissions audible. Intermittent passing road traffic dominant. During lulls, distant bypass traffic continuously audible at low level. Birdsong, crows and aircraft.

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



Monitoring Locations

SW-1	258297	109231
SW-2	258322	109102
SW-3	258352	108887
D1	258338	109073
D2	258319	109131
D3	258356	109126
N1	258321	109106
N2	258359	109126
N3	258339	109081
N4	258334	108877
N5	258422	108990



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CLIENT

Greenstar

TITLE

Monitoring Locations
Waterford

LEGEND

- Commercial/Industrial unit
- Private Dwelling
- Agricultural Land
- Surface Water Monitoring Point
- Dust Monitoring Point
- Noise Monitoring Point

FIGURE NUMBER

3.1

Scale

Not To Scale

Revision

A

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3.3 Dust Monitoring

Dust monitoring was carried out on two occasions at three on-site locations (D1, D2 and D3) in June and August 2014. The results of the monitoring are included on Table 3.7.

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 3.7 Dust Monitoring Results 2014

Dust Emission (mg/m²/day)	June	August	Emission Limit
Sample Location	(30 days)	(30 days)	(mg/m²/day)
D1	19.4	11.2	350
D2	65.7	69.1	350
D3	38.4	21.2	350

4. SITE DEVELOPMENT WORKS

4.1 Specified Engineering Works

There were a number of works undertaken to prepare the site for preparations in 2014. The works included.

- Q1: Installation of waste baler
- Q1: Repairs to cladding
- Q1: Installation of new entrance door in waste shed
- Q1: Installation of CCTV system
- Q1: Installation of electricity & lighting system
- Q1: Installation of odour control systems
- Q2: Upgrade of weighbridge system
- Q3: New Fire Detection & Alarm System
- Q4: Ground works in waste shed

4.2 Summary of Resource & Energy Consumption

Table 4.1 presents an estimate of the resources used on-site during the reporting period. As the site was closed there was no resource or energy consumption in 2013.

Table 4.1 Estimate of Resources Used On-Site in 2014

Resources	Quantities 2014
Diesel (green)	24,141 ltrs
Electricity	124,400 kwh
Hydraulic Oil	400 ltrs
Ad Blue Diesel Additive	None
Odour Neutraliser	1,050 ltrs

4.3 Bund Integrity Test

Condition 6.9 of the licence requires that the integrity and water tightness of all underground pipes, tanks, bunding structures and containers and their resistance to penetration by water or other materials carried or stored therein shall be tested and demonstrated by the licensee. It further states that this testing shall be carried out by the licensee at least once every three years and reported to the Agency on each occasion. This testing shall be carried out in accordance with any guidance published by the Agency. A written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the licensee.

Integrity testing was carried out in February 2014 and the 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

The facility stopped accepting waste in October 2010 and no wastes were accepted in 2012 or 2103. The facility recommenced waste activities in January 2014.

Table 5.1 shows the total quantities of waste received and consigned from the facility in 2014. The total amount of waste accepted and consigned in the past five years is shown on Table 5.2. A breakdown of the waste types is provided in accordance with the European Waste Catalogue and Hazardous Waste list. A more detailed description of the wastes accepted and consigned is provided in the PRTR submission in Appendix 1.

The total quantity of waste received was 34,979.70 tonnes. The total waste consigned was 33,420.16 tonnes. Some wastes remained onsite at the end of the reporting period pending movement offsite in Q1 2015. A total of 39.97 tonnes of waste water were consigned form site in 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
150101	Cardboard Packaging	6.4	
150106	Mixed Packaging	309.7	
161002	Waste water		39.97
191210	Baled MSW	46.06	
191212	MSW Municipal Mixed	5122.912	107.3
200301	MSW Municipal Mixed	28518.95	33,272.89
200307	C&I Dry Mixed	975.68	
Total Received		34,979.70	
Total Consigned			33,420.16
Recovery			33,380.19
Disposal			0
Recovery Rate			Approximately 100%

Table 5.2 – Waste Received and Consigned since 2009

	2013	2012	2011	2010	2009
Total Received	0	0	714.00	14,151	22,366
Total Consigned	0	0	673.68*	13,869	22,651
Recovery Rate	N/A	N/A	100%	100%	95.5%

NA-Not Applicable

*6% weight loss through evaporation.

6. ENVIRONMENTAL INCIDENTS AND COMPLAINTS

6.1 Incidents

There were no reportable incidents at the facility in 2014.

6.2 Register of Complaints

Greenstar maintains a register of complaints received at the facility offices. There were ten complaints received, each of which related to odour in the vicinity of the facility.

In each case, the complaint was thoroughly investigated and a response was issued to the Agency.

7. ENVIRONMENTAL DEVELOPMENT

7.1 Environmental Management Programme Report

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

The IMS has been developed for the achievement of continual improvement taking into account the requirements of the Waste Licence Conditions. Greenstar has prepared and effectively implement documented procedures and instructions in accordance with the requirements of both the OHSAS 18001:2007 and ISO 14001:2004. The facility is accredited to both standard and this accreditation was retained following an 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 experience waste management experience; has completed the FÁS waste management course.

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

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

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

7.2 Environmental Management Programme

7.2.1 Schedule of Objectives 2014

The site was not operational in 2013 and therefore there was not a set of targets and objectives set for 2014.

7.2.2 Schedule of Objectives 2015

The schedule of targets and objectives for 2015 are presented in Table 7.1.

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 Closure and Decommissioning Plan and a Environmental Liabilities Risk Assessment (ELRA) including Financial Provision (FP) were submitted to the Agency as part of the transfer of the licence which occurred in Q1 2014. Financial provision was approved by the Agency prior to completion of the Licence transfer in March 2014.

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 (de-odouriser spray system) is in place at the facility which can be operated automatically or manually by the Environmental Officer and Operations Supervisor as needed. In general, during operations the deodorizer is on full time. Outside operations it is set on a timer to spray for 10 minutes every hour. 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. During 2014, daily odour impact assessments of the facility and the vicinity were carried out and records are available on-site. These assessments were carried out in a manner consistent with the Agency Guidance Note for EPA Licensed Sites (AG5).

7.6 Foul water Volume Transported Off-Site

There was 39.97 tonnes of wastewater removed from site in 2014.

Table 7.1 Schedule of Objective and Targets 2015

No.	Objective	Target	Timescale	Responsibility
1	Upgrade & maintenance of existing building	Additional sealing of building	Q2 / Q3	Site Management / EHS
2	Energy Audit	Make site more energy efficient and help reduce the cost of energy bills	Q3	Site Management / EHS
3	Review of Emergency Response Plan	Revision of Plan and additional training for site personnel	Q2	Site Management / EHS
4	Odour Control Management	Maintain records of odour assessments as per licence requirements	Ongoing	Site Management / EHS
5	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
6	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
7	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



Environmental Protection Agency

| PRTR# : W0116 | Facility Name : Starrus Eco Holdings Limited (Butlerstown) |
 Filename : W0116_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 (Butlerstown)
PRTR Identification Number	W0116
Licence Number	W0116-02

Classes of Activity

No.	class_name
-	Refer to PRTR class activities below

Address 1	Six Cross Roads
Address 2	Carriganard
Address 3	Butlerstown
Address 4	
	Waterford
Country	Ireland
Coordinates of Location	-7.145867687 52.23057934
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	Environmental Executive
AER Returns Contact Telephone Number	01-2947949
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	3
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

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

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

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

4. 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# : W0116 | Facility Name : Starrus Eco Holdings Limited (Butlerstown) | Filename : W0116_2014.xls | Return Year : 2014 |

31/03/2015 14:55

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

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

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

SECTION B : REMAINING PRTR POLLUTANTS

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

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

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

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

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

Additional Data Requested from Landfill operators

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

Landfill:

Starrus Eco Holdings Limited (Butlerstown)

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# : W0116 | Facility Name : Starrus Eco Holdings Limited (Butlerstown) | Filename : W0116_2014.xls | Return Year : 2014 |

31/03/2015 14:55

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# : W0116 | Facility Name : Starrus Eco Holdings Limited (Butlerstown) | Filename : W0116_

31/03/2015 14:56

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# : W0116 | Facility Name : Starrus Eco Holdings Limited (Butlerstown) | Filename : W0116_2014.xls | Return Year : 2014 |

31/03/2015 14:56

SECTION A : PRTR POLLUTANTS

POLLUTANT		RELEASERS TO LAND			Please enter all quantities in this section in KGs		
No. Annex II	Name	M/C/E	METHOD		QUANTITY		
			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 No.	Name	M/C/E	METHOD		QUANTITY		
			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# : W0116 | Facility Name : Starrus Eco Holdings Limited (Butlerstown) | Filename : W0116_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 : Address of Next Destination Facility	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						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	19 12 12	No	6.24	11 other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12	R13	M	Weighed	Offsite in Ireland	Starrus Eco Holdings Ltd,W0177-03	Six Cross Roads Business Park ,Butlerstown ,Co. Waterford,,Ireland		
Within the Country	19 12 12	No	101.06	11 other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12	R13	M	Weighed	Offsite in Ireland	Starrus Eco Holdings Ltd,W0177-03	Six Cross Roads Business Park ,Butlerstown ,Co. Waterford,,Ireland		
Within the Country	20 03 01	No	690.01	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Wiser Bin Ltd,WCP-CK-10-0738-01	Unit 6,Rosehill Industrial Estate,Ballinacurra,Midleton Co. Cork,Ireland		
To Other Countries	20 03 01	No	27705.48	mixed municipal waste	R13	M	Weighed	Abroad	Indaver (EON Sweden),.,Sweden		
To Other Countries	20 03 01	No	3216.74	mixed municipal waste	R13	M	Weighed	Abroad	Boras Energi & Mijlo AB Sweden,Ml nr M 1856-10	70,Rydboholm,,Sweden		
To Other Countries	20 03 01	No	1225.82	mixed municipal waste	R13	M	Weighed	Abroad	Indaver (Moerdijk Netherlands),.,Netherlands		
Within the Country	20 03 01	No	434.84	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Glanway Limited,WFP-KK-14-0002-01	Belview Port,Co. Kilkenny,.,Ireland		
Within the Country	16 10 02	No	39.97	aqueous liquid wastes other than those mentioned in 16 10 01	D9	M	Weighed	Offsite in Ireland	Ormonde Organics Ltd,WFP-WD-10-0003-01	Killowen ,Portlaw ,Co. Waterford,,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 – <i>Group Environmental Manager</i> Oliver Callan – <i>Group H&S Manager</i>	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



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

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