Unit 15 Melbourne Business Park Model Farm Road Cork



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ANNUAL ENVIRONMENTAL REPORT

STARRUS ECO HOLDINGS LTD

GOREY BUSINESS PARK, GOREY

COUNTY WEXFORD

LICENCE NO. W0220-01

JANUARY 2016 – DECEMBER 2016

Prepared For: -

Starrus Eco Holdings Ltd, Fassaroe, Bray, Co. Wicklow

Prepared By: -

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31st March 2017

O'Callaghan Moran & Associates Registration/VAT Number: 8272844U

Project	Annual En	Annual Environmental Report 2016						
Client		Starrus Eco Holdings Ltd. W0220-01						
Report No	Date	Status	Prepared By	Reviewed By				
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1. INTRODUCTION

This is the 2016 Annual Environmental Report (AER) for the Starrus Eco Holdings Ltd (SEHL), Materials Recovery & Transfer facility (MRF) at Gorey Business Park, Ramstown, Gorey, County Wexford. It covers the period from the 1st January 2016 to the 31st December 2016. The 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 Industrial Emissions (IED) Licence (Reg. No. W0220-01) and the report format follows guidelines set in the "Guidance Note for Annual Environmental Report" issued by the Environmental Protection Agency (Agency)¹. Account is also taken of the AER Draft Guidance Document and AER Information Templates issued by the Agency in January 2013².

¹ EPA (Environmental Protection Agency) 1999 Waste Licensing – Draft Guidance on Environmental Management Systems and Reporting to the Agency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

The installation is located at Gorey Business Park, Ramstown Lower, Gorey, Co Wexford. The site encompasses 3,040m² (0.7 acres) and is accessed by an internal road serving the Business Park.

There are two interconnected steel portal frame buildings, which encompass approximately $1,000m^2$ and comprise the waste transfer building. The remaining area comprises open yard areas, paved with concrete, a weighbridge and associated weighbridge office. An installation office is adjacent to the yard.

2.2 Waste Management Activities

The licence allows SEHL to accept and process up to 30,000 tonnes of waste per annum, comprising commercial/industrial non-hazardous waste, household waste, and construction and demolition wastes. All waste processing takes place inside the waste transfer building, as specified in Condition 8.1 of the licence.

2.2.1 Waste Types & Processes

The installation is licensed to accept the following waste types and quantities, as specified in Schedule A of the Licence: -

- Household Waste (18,000 tonnes),
- Commercial & Industrial and Construction & Demolition (12,000 tonnes).

The key processes carried out at the installation include: -

- Segregation of C&I into different waste streams (paper, cardboard, glass, metal, green waste and wood) for further recovery at an appropriate facility
- Segregation of C&D into clean & dirty waste streams for further recovery purposes,
- Bulking up of domestic wastes (mixed municipal waste & dry mixed recyclables) for further recovery or disposal at an appropriate off-site facility.

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 stored prior to transfer to permitted/licensed off-site recycling facilities.

Commercial and Industrial Waste

Both mixed and segregated commercial waste is collected from commercial outlets. Commercial waste rich in recyclables (paper, cardboard, glass, metal, green waste and wood) is delivered to the installation both by permitted third party hauliers and by SEHL vehicles. Plastic, card and paper are stored prior to transfer to a suitable permitted/licensed off-site recycling outlet. Biodegradable wastes suitable for composting which is accepted at the installation are sent to an offsite composting facility. The remaining non-recyclable material is bulked and sent to appropriately licensed landfills.

C&D Waste

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

2.2.2 Plant List

A list of the plant in use at the installation is in Table 2.1. The plant provides 100% duty and 50% standby for waste processing.

Table 2.1Existing Plant

No.	Plant	Model	Operational Capacity	
1	Weighbridge	Avery Berkel	10m	
1	Teleporter/forklift	JCB TLT30D	70 t/hr	
1	Loader	JCB 426	70 t/hr	

3. EMISSION MONITORING

SEHL implements the environmental monitoring programme specified in the Licence to assess the significance of emissions from site activities. The programme includes groundwater, waste water removed off-site and noise monitoring.

The monitoring locations are shown on Figure 3.1. The monitoring is carried out in accordance with the frequency specified in the Licence. The results are submitted to the Agency at quarterly intervals. An overview of the monitoring results is presented in this Section, with summary tables provided.

3.1 Waste Water Programme

Wastewater is directed to a holding tank located beneath the concrete yard as shown on Figure 3.1. The accumulated liquid is removed as required to an off-site wastewater treatment plant (WWTP) for treatment. The volume removed in 2016 was 29.38 tonnes. It was tankered by Ormonde Organics Ltd to RILTA Environmental Ltd WWTP in Greenogue Business Park, Rathcoole, Co. Dublin.

Wastewater monitoring is carried out quarterly and the results are included on Table 3.1. Metals and organohalogens are analysed bi-annually and COD, ammonia and chloride are tested quarterly. The results are similar to previous monitoring rounds and indicate the water is suitable for treatment at a WWTP.

Parameter	Units	Q1 2016	Q2 2016	Q3 2016	Q4 2016
pH	pH Units	-	7.79	-	6.76
Conductivity	mS/cm	-	4,833	-	2,993
COD	mg/l	2,360	55	794	715
Total Ammonia	mg/l	104.12	100.69	21.25	20.13
Chloride	mg/l	462.7	816.8	351	589.5
Mercury	mg/l	-	< 0.001	-	< 0.001
Arsenic	mg/l	-	< 0.0025	-	0.0189
Boron	mg/l	-	< 0.0005	-	< 0.0005
Cadmium	mg/l	-	0.0107	-	0.0081
Chromium	mg/l	-	< 0.007	-	< 0.007
Copper	mg/l	-	0.016	-	0.008
Nickel	mg/l	-	1.030	-	0.319
Selenium	mg/l	-	< 0.003	-	< 0.003
Zinc	mg/l	-	< 0.003	-	< 0.003
VOC#	μg/l	_	n.d. except	_	n.d. except
	με/1	_	below	_	below
Toluene	μg/l	-	7	-	10
Benzene	μg/l	-	0.7	-	n.d.
ethylbenzene	μg/l	-	6.5	-	1
p/m-Xylene	μg/l	-	22	-	2
o-Xylene	μg/l	-	8.8	-	n.d.
4-Isopropyltoluene	μg/l	-	25	-	11
SVOC*	u a/1	-	n.d. except	-	n.d. except
5,000	μg/l		below		below
Phenol	μg/l	-	79	-	n.d.
4-Methylphenol	μg/l	-	288	-	n.d.
Total Phenols	μg/l	-	n.d.	-	200

Table 3.1Waste Water Results 2016

n.d. - Not Detected

- Not Required

3.2 Ground Water Monitoring

Schedule C of the Licence requires annual groundwater monitoring. There is an on-site well (MW-1) slightly up-gradient of site activity, which was installed to provide both a potable and process water supply. Testing of the well indicated that it was not suitable for potable use and it is not used for this purpose, but is used for monitoring purposes. The well location is shown on Figure 3.1.

There are no emission limits or trigger levels set in the Licence. The Agency requested that groundwater trigger levels be prepared for this monitoring well. These were prepared and were submitted to the Agency for their approval on the 30th June 2008. The proposed trigger levels were not exceeded. The results are compared to the Interim Guideline Values (IGV) on groundwater quality published by the Agency. The Table also includes 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 also used for comparative purposes where a GTV does not exist.

The levels of conductivity, sodium, sulphate and chloride exceeded both the respective IGV and TV levels. Faecal coliforms were not detected, low levels of total coliforms were detected, however, the water is not used for drinking purposes. The levels measured are similar to those measured during previous monitoring events. The proposed trigger levels were not exceeded.

The groundwater monitoring results for 2016 are similar to those measured during previous monitoring events and the elevated levels are not related to current site activities.

OCM carried out a hydrogeological assessment of the site which was submitted to the Agency in July 2011. The assessment confirmed that the site was formerly occupied by a tannery, where salt was used in the curing process. Tanneries are recognised sources of soil and groundwater contamination and the moderately-elevated levels of sodium, chloride, and conductivity detected are consistent with the historic site use, and are not related to the waste transfer activities. In correspondence from May 2012 the Agency has acknowledged that the report meets their requirements in terms of the level of assessment completed.

Parameter	Units	MW1	Proposed Trigger Level	TV	IGV
pH	pH Units	6.54	6.88	NE	6.5 – 9
Conductivity	mS/cm	3.245	7.84	0.800-1.875	1.000
Ammoniacal Nitrogen	mg/l	<0.03	-	0.065-0.175	0.15
Chloride	mg/l	794.7	2579.38	24-187.5	30
Potassium	mg/l	2.8	6.84	NE	5
Sodium	mg/l	544.7	1631.25	150	150
Mercury	mg/l	< 0.001	-	0.00075	0.001
Arsenic	mg/l	< 0.0025	-	0.0075	0.01
Boron	mg/l	0.034	-	0.75	1
Cadmium	mg/l	< 0.5	-	0.00375	0.005
Chromium	mg/l	< 0.0015	-	0.0375	0.03
Copper	mg/l	< 0.007	-	1.5	0.03
Lead	mg/l	< 0.005	-	0.01875	0.01
Nickel	mg/l	0.005	-	0.015	0.02
Selenium	mg/l	< 0.003	-	NE	NE
Zinc	mg/l	0.01	-	NE	0.1
TOC	mg/l	5	-	NE	NE
Fluoride	mg/l	< 0.3	-	NE	1
Sulphate	mg/l	241.16	-	187.5	200
ortho Phosphate	mg/l	< 0.06	-	NE	0.03
Nitrate	mg/l	5.1	-	37.5	25
Nitrite	mg/l	< 0.02	-	0.375	0.1
TON	mg/l	1.2	-	NE	NE
Total solids	mg/l	1,710	-	NE	NE
Dissolved Oxygen	mg/l	6	-	NE	NAC
Total Cyanide	mg/l	< 0.01	-	0.0375	0.01
Total Alkalinity	mg/l	114	-	NE	NAC
Total Phenols	mg/l	< 0.1	-	NE	NE
VOC	μg/l	<5	-	Various	NE
SVOC	μg/l	<5	-	Various	NE
Faecal Coliforms	Cfu/100ml	<1	-	0	0
Total Coliforms	MPN/100ml	2	-	0	0

Table 3.2Groundwater Monitoring Results – June 2016

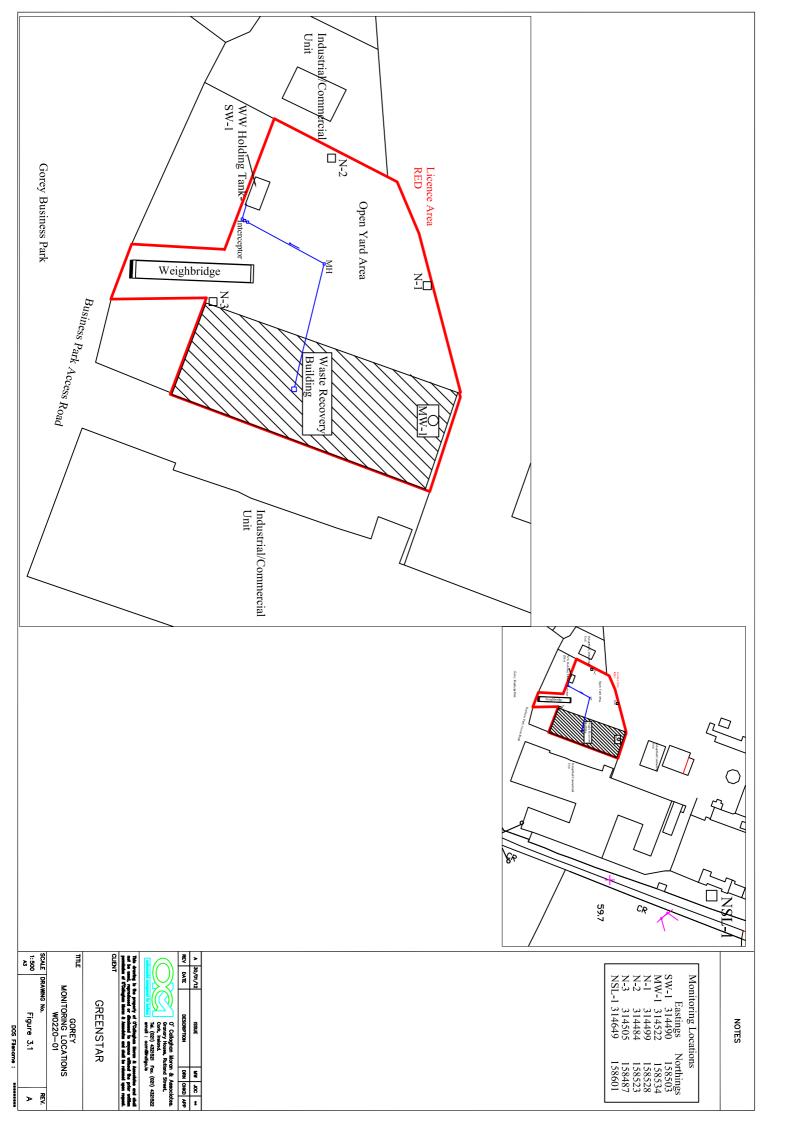
3.3 Noise Monitoring

The annual noise survey was conducted in September 2016 at three offsite noise monitoring locations, N1, N2 and N3. The survey concluded that the installation was fully compliant with the licence requirements. A summary of the noise results is shown on Table 3.3.

The licence sets a daytime noise limit of 55 dB with respect to offsite noise sensitive locations. At station N1, the only station not located within the boundaries of Gorey Business Park, no noise emissions were audible from the installation.

Station	Date	Time	Wind	LAeq 30	LAF10 30	LAF90 30	Specific
			vector	min	min	min	LAeq 30 min
				dB	dB	dB	dB
	15.09.16	0927-0957	0	68	70	39	<<39
N1	Facility: No emissions audible.						
	15.09.16		0	57	57	45	44
N2	 Facility: Wheelie bin power washing quite audible for much of interval. Forklift truck also quite audible continuously 0855-0908. Extraneous: Intermittent vehicle movements in surrounding business park clearly audible when present. Sporadic activity at nearest premises clearly audible. Distant road traffic almost continuously quite audible. Bird song/calls. Occasional hounds barking 1-200 m to NW. Repeated hammering at construction site to NE quite audible throughout interval. Aircraft. Specific LAeg T determination: L90 0855-0908, normalised to 30 min. 						
	15.09.16	0817-0847	0	57	60	49	54
N3	 Facility: Loader in use in building until 0831 clearly audible, dominating soundscape. Extraneous: Local cars at 0828, 0834, 0836 dominant. Occasional traffic movements in business park also quite audible. Air conditioning cassette on nearby building continuously audible at low level. After 0831, distant road traffic audible at low level, local crow calls, and occasional activity across business park. Specific LAeq T determination: LAeq to 0831, normalised to 30 min. 						

Wind vector: See final appendix. **Specific** L_{Aeq} . 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.



4. SITE DEVELOPMENT WORKS

4.1 Specified Engineering Works

Table 4.1 outlined the scheduled engineering works that were completed on site in 2016. It is not proposed to carry out any engineering works in 2017.

Table 4.1Scheduled Engineering Works 2016

Description of Works	Completion Date
Roller Doors	Q1
CCTV monitoring system	Q1
External boundary wall subject to planning permission	Q2
New Lighting	Q4

4.2 Energy Efficiency

An energy audit was carried out in May2016. The installation is not a significant consumer of resources. Table 4.2 presents an estimate of the resources used on-site during the reporting period.

Table 4.2Estimates of Resources Used On-Site

Resources	2012	2013	2014	2015	2016
Diesel	5,900 Litres	12,526 litres	13,818 litres	18,886 litres	18,275 litres
Odour Control Additive	190 Litres	350 litres	400 litres	550 litres	450 litres
Hydraulic Oil	100 Litres	280 litres	250 litres	125 litres	140 litres
Electricity	27,000 kWh	43,780 kWh	54,765 kWh	44,887 kWh	43,566 kWh

4.3 Tank and Pipeline Integrity Testing

As per Condition 3.18.5 of the Licence, tank and pipeline testing is to be carried out every three years. Testing was completed in December 2015 and was passed fit for purpose. Bund integrity testing was also carried out in December 2015 and all bunds passed fit for purpose. Testing will be carried out again in 2018. The reports are retained at the installation for Agency inspection.

Table 5.1 shows the quantities of wastes accepted and consigned for the reporting period. A more detailed description of the wastes received and consigned in 2016 is presented in the PRTR submission in Appendix 1.

The total quantity of waste received was 29,862 tonnes and the total amount consigned was 29,879 tonnes. The waste received and consigned in 2016 is presented in Tables 5.1. For comparative purposes the amounts of waste received and consigned from 2007 to 2015 are presented in Table 5.2. All the wastes consigned from the site went to authorised recovery and disposal facilities and copies of the relevant Facility Permit or Waste Licences retained on site for Agency inspection.

EWC	Description	Waste In	Waste Out
15 01 01	Paper and cardboard packaging	555.612	550.04
15 01 02	Plastic packaging	85.312	9.02
15 01 05	Composite packaging	0.98	
17 01 07	Concrete, Bricks, Tiles & Ceramics		363.54
17 02 03	Plastic	0.08	
17 05 04	C&D Mixed	2.46	
17 09 04	Mixed C&D wastes	447.11	237.12
19 12 09	C&D Mixed	1.98	
19 12 10	Combustible waste (refuse derived fuel)	39.48	
20 01 01	Paper and cardboard	39.28	
20 01 08	Biodegradable kitchen and canteen waste	3.94	
20 01 38	Wood	68.25	
20 01 39	Plastics	105.26	
20 01 40	Metals	4.1	11.02
20 03 01	Mixed municipal waste	24,712.691	25,133.27
20 03 03	Street-cleaning residues	768.48	752.44
20 03 07	Bulky waste	3,027.125	2,822.92
	Total Received	29,862.14	
	Total Consigned		29,879.37
	Total Recovered		9,872.34
	Total Disposed		20,007.03
	Recovery Rate		33%

Table 5.1	Waste Received & Consigned 2016
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	Total Received	Total Consigned	Total Recovery	Total Disposed	Recovery Rate
2015	29,975	29,953	9,863	20,090	67.07%
2014	23,851	23,469	9,749	13,719	41.61%
2013	25,618	25,397	13,024	12,373	51.28%
2012	21,756	21,418	6,664	14,753	31%
2011	11,496	11,235	4,027	7,208	35.8%
2010	11,651	11,572	4,214	7,359	36.41%
2009	13,477	13,666	3,614	10,052	26.4%
2008	15,885	16,037	7,421	8,616	46.28%
2007	18,979	19,781	9,229	10,551	46.66%

Table 5.2Previous Years Waste Received and Consigned

6. ENVIRONMENTAL INCIDENTS AND COMPLAINTS

6.1 Incidents

There were no incidents during the reporting period.

6.2 Register of Complaints

SEHL maintains a register of complaints received in accordance with Condition 11.9 of the waste licence. Three complaints regarding pests and odour were received in 2016.

7. ENVIRONMENTAL DEVELOPMENT & CONTROL

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 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 site was accredited to both Standards in June 2012 and this accreditation was retained following an audit in July 2014.

As part of this IMS, SEHL has developed a list of environmental, management, operating and maintenance procedures, details of which are outlined in Appendix 2. 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.

7.1.1 Schedule of Objectives 2016

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

7.1.2 Schedule of Objectives 2017

A schedule of targets and objectives for 2017 has been set by the management of the installation. These objectives are outlined in Table 7.2.

Table 7.1Schedule of Objective and Targets 2016

No	Objective	Target	Timescale	Responsibility	Status
1	Increase awareness of Odour Management on site group wide	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	Waste storage practices	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	Emergency response procedures - ER pack update	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	CRAMP, ELRA & Financial Provision	CRAMP, ELRA & Financial Provision to be reviewed	Q2/Q3	EHS team	Q1 2017
5	Waste acceptance, classification & records	EWC training for all weighbridge ops. Centralisation of all licences & permits inc NWCPs for hauliers.	Q2/Q3	EHS team	Ongoing
6	Replace boundary wall (subject to PP)	Planning application lodged for replacement boundary wall	Q1/Q2	Site Management/ EHS	Complete

Table 7.2Schedule of Objective and Targets 2017

No	2017 Objective	Target	Timescale	Responsibility
1	Odour management	Ensure odour management plans are followed and potential new sources of odour are identified	Q1 - Q4	Site management
2	Fire prevention	Implement recs from Fire Risk Assessments Update ERP & APP Maintain fire detection equipment	Q1 - Q4	Site management/EHS team
3	Waste storage	Review waste storage practices on each site to ensure that they are in line with licence conditions, fire prevention and insurance recommendations	Q1 - Q4	Site management/EHS team
4	Waste acceptance, classification & records	EWC training for all weighbridge ops. Centralisation of all licences & permits including NWCPs for hauliers.	Q1 - Q4	EHS team
5	CRAMP, ELRA & Financial Provision	CRAMP, ELRA & Financial Provision to be reviewed	Q2	EHS team
6	Lighting in MRF buildings	Clean & upgrade where required all light fittings in MRF buildings	Q3	Site management
7	NWCP exemptions	Implement NWCP exemption declarations	Q1 - Q4	Site management
8	Electrical Control Panel	Relocate the electrical control panel outside of shed	Q2 - Q4	Site management
9	Replace wind sock	Replace the windsock at the installation	Q2	Site management
10	Bund Testing	Complete bund testing	Q3	EHS team

7.2 Management Structure

Details of the site management structure are given below.

Name:	Andrew Egan
Responsibility:	Depot Manager
Experience:	9 years experience. FÁS waste management course completed in 2015.
Name:	Sean Doran
Responsibility:	Sales Support
Experience:	12 years experience. FÁS waste management course completed.
Name:	Thomas O'Leary
Responsibility:	Operative / Machinery / Loader / Driver
Experience:	11 years experience.

7.2.1 Staff Training

Environmental training is carried out for any new staff employed at the installation as required. Copies of all training records are held in the installation office.

7.3 Communications Programme

Condition 2.2.2.7 requires the establishment of a Communications Programme. SEHL is committed to setting the standard in waste management and ensuring environmental compliance in all operations. In addition, SEHL's updated Environmental and Health & Safety Policy makes a specific commitment to ensuring that the policy itself and records are available to the public and interested parties.

SEHL has drawn up a Communications Programme, which details how members of the public are facilitated in accessing environmental information at the installation.

Records available for public inspection on site include:-

- Environmental Health & Safety Policy,
- Waste Licence,
- Licence Application and Review documentation,
- Monitoring Records,
- Complaints File,
- EPA Correspondence File.

Opening Times for Inspection of Records are from 10 am - 4 pm. Visits to the site should be arranged in advance by ringing the Facility Manager or Supervisor at 1890 600 900.

7.4 Nuisance Control

SEHL has contracted Prokill Ireland South East Ltd (PSE) to carry out vermin inspections at the installation. PSE Ltd visit the installation every two week and inspect for vermin and inspect and maintain the 9 bait boxes and 4 mice boxes on the site. The installation has not had any problem with fly infestations, but should a problem occur, this can be dealt with by PSE Ltd on a call out basis.

7.5 Water Demand

The only water used on the site is for sanitary purposes in the toilets (2 No. staff), the canteen and occasionally for the odour suppression system. The volume of odour suppressants used in 2016 was 450 litres. The total amount of water used in 2016 was 30 m^3 .

7.6 Waste Generated On-site

All waste generated is source separated and removed off site for recycling or disposal.

7.7 European Pollutant Release and Transfer Register

A copy of the EPRTR return submitted to the Agency via the web-based data reporting system is included in Appendix 1.

7.8 Financial Provision & Measures to Minimise Potential Environmental Damage

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 installation has an Environmental Management Programme (EMP) in place. The EMP serves as a guidance document for installation staff and describes operational control and management practices that are applied at the installation. The EMP is also the core element of the Environmental Management System (EMS) for the installation and is designed to ensure that management of site activities complies with regulatory requirements and best practice.

The EMS includes a detailed Emergency Response Procedure which sets out the steps to be taken in the event of an incident at the installation 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.

8. OTHER REPORTS

No other reports were requested by the Agency for inclusion in the AER during the reporting period.

APPENDIX 1

European Pollutant Release and Transfer Register



| PRTR# : W0220 | Facility Name : Starrus Eco Holdings Limited (Gorey) | Filename : W0220_2016.xls | Return Year : 2016 |

Guidance to completing the PRTR workbook

PRTR Returns Workbook

REFERENCE YEAR 2016

1. FACILITY IDENTIFICATION

Parent Company Name	Starrus Eco Holdings Limited
Facility Name	Starrus Eco Holdings Limited (Gorey)
PRTR Identification Number	W0220
Licence Number	W0220-01

Classes of Activity

No. class_name - Refer to PRTR class activities below

	Ramstown
Address 2	
Address 3	
Address 4	
	Wexford
Country	
Coordinates of Location	-6.30814 52.6661
River Basin District	IESE
NACE Code	
Main Economic Activity	Recovery of sorted materials
AER Returns Contact Name	Sara Smyth
AER Returns Contact Email Address	sara.smyth@greenstar.ie
AER Returns Contact Position	Environmental Engineer
AER Returns Contact Telephone Number	01 2746236
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	5
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 200	2)
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)	
?	

4.1 RELEASES TO AIR Link to previous years emissions data

| PRTR# : W0220 | Facility Name : Starrus Eco Holdings Limited (Gorey) | Filename : W0220_2016.xls | Return Year : 2016 |

31/03/2017 16:03

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

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

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

SECTION B : REMAINING PRTR POLLUTANTS

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

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

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

		Please enter all quantities in this section in KGs							
POLLUTANT		METHOD			QUANTITY				
				Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0	.0	0.0	0.0) 0.0

Additional Data Requested from Landfill operators									
For the purposes of the National Inventory on Greenho summary data on landfill gas (Methane) flared or utilise methane generated. Operators should only report thein T(total) KG/yr for Section A: Sector specific PRTR pollu	d on their facilities to accompany the figures for total Net methane (CH4) emission to the environment under								
Landfill:	Starrus Eco Holdings Limited (Gorey)				_				
Please enter summary data on the									
quantities of methane flared and / or utilised			Meth	nod Used					
				Designation or	Facility Total Capacity m3				
	T (Total) kg/Year	M/C/E	Method Code	Description	per hour				
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# :	W0220 Facility Na	me : Starrus Eco Holdings Limited (G	aorey) Filename : W0220_3	31/03/2017 16:03					
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								
	RELEASES TO WATERS			Please enter all quantities in this section in KGs							
	POLLUTANT		QUANTITY				QUANTITY				
				Method Used							
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	Т	(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 PI						Please enter all quantities in this section in KGs			
POLLUTANT					QUANTITY				
				Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	
					0.	0 0.	0 0.0	0.0	

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

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

RELEASES TO WATERS Ple						s in this section in KG	S		
POLLUTANT						QUANTITY			
				Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	
					0.	0.0	0.0	0.0	

4.3 RELEASES TO WASTEWATER OR SEWER

Link to previous years emissions data | PRTR#: W0220 | Facility Name : Starrus Eco Holdings Limited (Gorey) | Filename : W0220_2016.: 31/03/2017 16:04

SECTION A : PRTR POLLUTANTS

OFFSITE TRANSFER OF POLLUTANTS DESTINED FO	Please enter all quantities in this section in KGs						
POLLUTANT		М	ETHOD	QUANTITY			
			Method Used				
No. Annex II Name	M/C/E	Method Code Designation or Description		Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
				0.0		0.0 0.0	0.0

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

SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER PIE						in this section in KG	S		
POLLUTANT			MET	HOD	QUANTITY				
		Method Used							
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidenta	l) KG/Year	F (Fugitive) KG/Year
					0.	0	0.0	0.0	0.0

4.4 RELEASES TO LAND

Link to previous years emissions data | PRTR# : W0220 | Facility Name : Starrus Eco Holdings Limited (Gorey) | Filename : W0220_2016.xls | Return Year : 2016 |

31/03/2017 16:04

SECTION A : PRTR POLLUTANTS

RELEASES TO LAND P					Please enter all quantit	ies in this section in KO	Gs	
POLLUTANT			ME	THOD			QUANTITY	
				Method Used				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidenta	al) 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)

	RE	EASES TO LAND			Please enter all quantities in this section in KGs			
POLLUTANT			MET	HOD	QUANTITY			
			Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	
					0.)	0.0 0.0	

AER Returns Workbook

5. ONSITE TREATM	ENT & OFFSITE TRA	NSFERS OF		PRTR# : W0220 Facility Name : Starrus Eco Holdings	s Limited (Gorey)	Filename	e : W0220_2016.xls Retu	urn Year : 2016				03/04/2017 12
			Quantity (Tonnes per Year)	all quantities on this sheet in Tonnes	Waste		Method Used		Licence/Permit No of Next Licence/Permit No of Next Destination Facility <u>Non</u> <u>Haz Waste</u> : Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility <u>Non Haz Waste</u> : Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destinati i.e. Final Recovery / Disposal Sit (HAZARDOUS WASTE ONLY)
Transfer Destination	European Waste Code	Hazardous		Description of Waste	Treatment Operation	M/C/E	Method Used	Location of Treatment				
Within the Country	15 01 01	No	391.34	paper and cardboard packaging	R13	М	Weighed	Offsite in Ireland	Starrus Eco Holdings Ltd.,W0053-03	Fassaroe,Bray,.,Co Wicklow,Ireland Millennium Business		
Within the Country	15 01 01	No	4.84	paper and cardboard packaging	R13	М	Weighed	Offsite in Ireland	Starrus Eco Holdings Ltd.,W0183-01	Park,Grange,Ballycoolin,Dub lin 11,Ireland Clermont Business		
Within the Country	15 01 02	No	9.02	2 plastic packaging mixture of concrete, bricks, tiles and	R13	М	Weighed	Offsite in Ireland	Leinster Environmentals,WP 2008/06	Park,Haggardstown,Dundalk ,Co. Louth,Ireland		
Within the Country	17 01 07	No	363.54	ceramics other than those mentioned in 17 01 06 mixed construction and demolition wastes other than those mentioned in 17 09 01, 17	R13	М	Weighed	Offsite in Ireland	Chi Environmental Ltd.,WMP 023/2007 Sean Kinsella Site Developments Ltd.WFP-WX-	Kilkenny,Ireland Banntown		
Within the Country	17 09 04	No	237.12	2 09 02 and 17 09 03	R5	М	Weighed	Offsite in Ireland		Wexford,Ireland Enniscorthy,,Wexford,Irela		
Within the Country	20 01 40	No	11.02	2 metals	R4	М	Weighed	Offsite in Ireland	Molloys,WP/08/14B	nd		
Within the Country	20 03 01	No	15698.13	8 mixed municipal waste	D5	м	Weighed	Offsite in Ireland	Ballynagran Landfill Ltd.,W0165-02 Murray Waste Recycling	Ballynagran Landfill,Coolbeg & Kilcandra,.,Wicklow,Ireland Coolatore,Ferns,Co	I. Contraction of the second se	
Within the Country	20 03 07	No	11.32	2 bulky waste	R13	М	Weighed	Offsite in Ireland	Limited,W0258-01 Knockharley Landfill	Wexford,Ireland Knockharley,Co.		
Within the Country	20 03 01	No	3556.46	s mixed municipal waste	D5	М	Weighed	Offsite in Ireland	Limited,W0146-02	Meath,,ireland Ballymount		
Within the Country	20 03 01	No	1895.42	? mixed municipal waste	R13	М	Weighed	Offsite in Ireland	Irish Packaging Recycling,W0263-01	Road,Walkinstown,Dublin 12,.,Ireland Ballymount Cross,Tallaght,Dublin		
Within the Country	20 03 01	No	401.18	mixed municipal waste	R13	М	Weighed	Offsite in Ireland	Nurendale Ltd,W0039-02 Starrus Eco Holdings	24,Ireland Fassaroe,BrayCo		
Within the Country	20 03 01	No	3582.08	mixed municipal waste	R13	М	Weighed	Offsite in Ireland		Wicklow,Ireland Knockharley,Co.		
Within the Country	20 03 03	No	21.14	street-cleaning residues	D5	М	Weighed	Offsite in Ireland	Limited,W0146-02	Meath,,ireland		
Within the Country	20 03 03	No	731.3	street-cleaning residues	D5	м	Weighed	Offsite in Ireland	Ballynagran Landfill Ltd.,W0165-02 Starrus Eco Holdings	Ballynagran Landfill,Coolbeg & Kilcandra,.,Wicklow,Ireland Fassaroe,Bray,.,Co	I.	
Within the Country	20 03 07	No	2776.34	bulky waste	R13	М	Weighed	Offsite in Ireland		Wicklow,Ireland Six Cross Roads Business		
Within the Country	15 01 01	No	13.38	paper and cardboard packaging	R13	М	Weighed	Offsite in Ireland		Park,Butlerstown ,Waterford,.,Ireland Ballymount		
Within the Country	15 01 01	No	140.48	paper and cardboard packaging	R3	м	Weighed	Offsite in Ireland	Irish Packaging Recycling,W0263-01	Road,Walkinstown,Dublin 12,.,Ireland Rathdrinagh,Beauparc,Nava		
Within the Country	20 03 07	No		bulky waste the Description of Waste then click the delete button	R13	М	Weighed	Offsite in Ireland	Nurendale Ltd,W0140-04	n,Co. Meath,Ireland		

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE | PRTR# : W0220 | Facility Name : Starus Eco Holdings Limited (Gorey) | Filename : W0220_2016.xls | Return Year : 2016 |

APPENDIX 2

Procedures List



greenstar		Procedure Listing
Doc. No.: Control	Revision No.: As Shown	Issue Date: As Shown
Approved By:	Malcolm Dowling – Group Compliance Manager	Page 1 of 5

Integrate	ed 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 Fork Truck Procedure Rev 01, 28/04/14 SP-04 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 Rev 01, 28/04/14 Procedure (SCGT) SP-09 Weighbridge & Tipping Procedure (SCGT) Rev 01, 28/04/14 Cleaning of Washing Bay (Greenogue) Rev 01, 28/04/14 SP-10



greenstar setting the standard		Procedure Listing
Doc. No.: Control	Revision No.: As Shown	Issue Date: As Shown
Approved By:	Malcolm Dowling – Group Compliance Manager	Page 2 of 5

Environm	ental 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



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	0.C
01.02.11	09	IP-10	03	Inclusion of SP-08	0.C
01.02.11	10	IP-15	02	Removal of SF-022	0.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	0.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	0.C
01/12/11	18	SP-09	01	Inclusion of new procedure for SCGT	0.C
01/12/11	19	SP-10	01	Inclusion of new procedure for SCGT	0.C
03/05/12	20	SP-01	02	Amendment to remove SF 028	0.C
05/05/12	21	SP-11	01	Inclusion of a new procedure for Greenogue	0.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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Doc. No.: Control	Revision No.: As Shown	Issue Date: As Shown
Approved By:	Malcolm Dowling - Group Compliance Manager	Page 4 of 5

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	0.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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