

Unit 15
Melbourne Business Park
Model Farm Road
Cork



E:info@ocallaghanmoran.com
www.ocallaghanmoran.com
T: 021 434 5366

ANNUAL ENVIRONMENTAL REPORT
STARRUS ECO HOLDINGS LTD
GREENOGUE MATERIALS RECOVERY FACILITY
LICENCE NO. W0188-01
JANUARY 2014– DECEMBER 2014

Prepared For: -

Starrus Eco Holdings Ltd,
(Greenstar)
Unit 6,
Ballyogan Business Park,
Ballyogan Road,
Sandyford,
Dublin 18

Prepared By: -

O' Callaghan Moran & Associates,
Unit 15 Melbourne Business Park,
Model Farm Road,
Cork.

31st March 2015

Project	Annual Environmental Report 2014			
Client	Starrus Eco Holdings Ltd (Greenstar) W0188-01			
Report No	Date	Status	Prepared By	Reviewed By
0480905	30/03/2015	Draft	Barry Sexton MSc.	Neil Sandes PGeo
0480905	31/03/2015	Final	Barry Sexton MSc.	Neil Sandes PGeo

TABLE OF CONTENTS

	<u>PAGE</u>
1. INTRODUCTION.....	1
2. SITE DESCRIPTION	2
2.1 SITE LOCATION & LAYOUT	2
2.2 WASTE MANAGEMENT ACTIVITIES	2
2.2.1 <i>Waste Types & Processes</i>	2
2.2.2 <i>Plant List</i>	4
3. EMISSION MONITORING	5
3.1 SURFACE WATER MONITORING	5
3.2 WASTEWATER MONITORING	7
3.3 NOISE SURVEY	9
3.4 DUST MONITORING	9
4. SITE DEVELOPMENT WORKS	13
4.1 SPECIFIED ENGINEERING WORKS	13
4.2 SUMMARY OF RESOURCE & ENERGY CONSUMPTION	13
4.3 TANK & PIPELINE INTEGRITY TESTING	13
5. WASTE RECEIVED AND CONSIGNED FROM THE FACILITY	15
6. ENVIRONMENTAL INCIDENTS AND COMPLAINTS	19
6.1 INCIDENTS	19
6.2 REGISTER OF COMPLAINTS.....	19
7. ENVIRONMENTAL DEVELOPMENT	20
7.1 ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT	20
7.1.1 <i>Site Management Structure</i>	20
7.1.2 <i>Staff Training</i>	21
7.2 ENVIRONMENTAL MANAGEMENT PROGRAMME PROGRESS REPORT & PROPOSAL....	21
7.2.1 <i>Schedule of Objectives 2013 –Progress Report</i>	21
7.2.2 <i>Schedule of Objectives 2014 – Proposal</i>	21
7.3 COMMUNICATIONS PROGRAMME	25
7.4 NUISANCE CONTROLS	25
7.5 WASTE RECOVERY REPORT	26
7.6 ELRA & REPORT ON FINANCIAL PROVISION	26
7.7 WASTEWATER VOLUME PRODUCED AND TRANSPORTED OFF-SITE	26
8. OTHER REPORTS.....	27
8.1 EUROPEAN POLLUTANT RELEASE AND TRANSFER REGISTER.....	27

APPENDIX 1 European Pollutant Release and Transfer Register

APPENDIX 2 Procedures List

1. INTRODUCTION

This is the 2014 Annual Environmental Report (AER) for the Starrus Eco Holdings Ltd (Greenstar), Materials Recovery & Transfer facility (MRF) at Site 14B, Phase 3, Road 3A, Greenogue Industrial Estate, Rathcoole, County Dublin. It covers the period from the 1st January 2014 to the 31st December 2014. Transfer of the licence from Greenstar Limited to Starrus Eco Holdings Ltd was completed in March 2014.

The content is based on Schedule B of the Waste Licence (Reg. No. W0188-01) 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 & Layout

The site, which encompasses an area of 0.603 ha, is located within the Greenogue Industrial Estate, Rathcoole, Co Dublin. The facility comprises one waste transfer building and ancillary infrastructure, including administration offices, weighbridge, vehicle wash and paved open yard areas.

2.2 Waste Management Activities

The licence allows Greenstar to accept and process up to 95,000 tonnes of waste per annum consisting of non-hazardous Commercial & Industrial (C&I), Construction and Demolition (C&D) and Household waste. All waste processing takes place inside the waste transfer building as specified in Condition 5.1 of the licence.

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 (15,000 tonnes),
- Commercial (37,500 tonnes),
- Industrial (5,000 tonnes),
- Construction & Demolition (37,500 tonnes).

The maximum tonnage 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 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

All waste accepted at the facility is unloaded within the existing waste transfer building. Mixed wastes are emptied at separate bays to pre-segregated wastes. All waste intake is inspected for unsuitable material and if any is identified, it is transferred to a dedicated waste quarantine area.

Residual or black bin waste is generally delivered to the facility in refuse collection vehicles and is transferred to large bulk transporters before onward transfer to an appropriate licensed disposal or recovery facility. Separately collected dry recyclable waste is stored separately and bulked before removal off-site to authorised waste recovery facilities. Segregated biodegradable wastes suitable for composting are stored separately in sealed container pending removal off-site to an authorised composting facility.

Greenstar also provides a skip hire service to private individuals. All skips arriving at the facility are netted or covered. Recyclable material is segregated, where possible, from the residual-type waste and is transferred off-site to suitable licensed or permitted recycling facilities.

Commercial and Industrial Waste

Greenstar provides skips and bins of varying sizes to a wide range of commercial and industrial premises. Recyclable material collected from commercial customers (paper, cardboard, glass, metal, green waste and wood) is stored separately from the general waste stream and is bulked prior to transfer to suitable recycling facilities. The remaining non-recyclable and residual material is sent to licensed landfills. Biodegradable waste is stored separately in a sealed container prior to dispatch to an authorised treatment facility.

Construction and Demolition Waste

Construction and demolition material arrives on-site in skips of varying sizes. The loads are inspected and segregated on-site. Recoverable materials are extracted and sent off-site either for re-use or recycling. The non-recyclable materials are transferred to a licensed landfill.

2.2.2 Plant List

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

Table 2.1 Existing Plant

No.	Plant	Model	Operational Capacity
1	Loading Shovel	Liebherr	70t/hr
1	Fork Lift	Toyota	60 hr/wk
1	Grab	Fuchs	70t/hr
1	Weighbridge – 2 scales	Avery Berkel	60

3. EMISSION MONITORING

Greenstar implements a comprehensive environmental monitoring programme to assess the significance of emissions from site activities. The programme includes surface water, wastewater, noise and dust monitoring. The monitoring locations are shown on Figure 3.1 and 3.2. The results are reported to the Agency at quarterly intervals. An overview of the monitoring results is presented in this Section, with summary data included.

3.1 Surface Water Monitoring

Surface water run-off is confined to run-off from the roofed area of the waste transfer building and run-off from some of the paved yards and is completely dependent on rainfall. Prior to discharge the surface water is treated by a Class 1 petrol/oil interceptor which is maintained regularly throughout the year.

The sampling and analysis was carried out in accordance with recognised quality assurance and control procedures. The range of analysis included Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), suspended solids (TSS), pH, electrical conductivity, mineral oils, total nitrogen and total ammonia. The results are presented in Tables 3.1 and 3.3, which include the trigger levels and Emission Limit Values (ELVs) set in the licence.

There was an exceedance of the trigger levels or ELVs. The level of suspended solids detected at SW-1 in December 2014 (56mg/l) was greater than the trigger level of 35mg/l for suspended solids.

The ammonia levels were elevated during the reporting period. Due to these elevated levels the Agency requested that Greenstar increase the surface water sampling for ammonia to be increased to monthly. The source of the ammonia was suspected to be a surface water gully located to the east of the waste processing building and bin wash area. Greenstar diverted this surface water gully to the waste water system in Q-3 2014. This resulted in a reduction in the levels of ammonia detected at SW-1 following the diversion. Following an instruction from the Agency in December 2014 Greenstar have implemented weekly surface water sampling for ammonia at SW-1 into 2015.

Greenstar has carried out jetting and cleaning of interceptors and surface water drains on site throughout 2014

Table 3.1 Surface Water Monitoring Results 2014

Parameter	Units	SW 1 February 2014	SW 1 May 2014	SW 1 June 2014	Trigger Levels	Emission Limit
pH	pH units	7.3	-	7.40	N/A	N/A
Temperature	°C	7.2	-	13.2	N/A	N/A
Conductivity	mS/cm	0.473	-	0.603	N/A	N/A
Total Ammonia	mg/l	3.01	3.69	5.81	N/A	N/A
BOD	mg/l	10	-	3	25	N/A
COD	mg/l	52	-	32	N/A	N/A
Total Suspended Solids	mg/l	32	-	21	35	N/A
Total Nitrogen	mg/l	5.7	-	8.2	N/A	N/A
Mineral Oils	mg/l	<0.01	-	<0.01	N/A	5

N/A – None Available

NDP – No determination possible due to insufficient sample

Table 3.2 Surface Water Monitoring Results 2014

Parameter	Units	SW 1 July 2014	SW 1 August 2014	SW 1 September 2014	Trigger Levels	Emission Limit
pH	pH units	-	-	Dry	N/A	N/A
Temperature	°C	-	-	Dry	N/A	N/A
Conductivity	mS/cm	-	-	Dry	N/A	N/A
Total Ammonia	mg/l	5.51	18.77	Dry	N/A	N/A
BOD	mg/l	-	-	Dry	25	N/A
COD	mg/l	-	-	Dry	N/A	N/A
Total Suspended Solids	mg/l	-	-	Dry	35	N/A
Total Nitrogen	mg/l	-	-	Dry	N/A	N/A
Mineral Oils	mg/l	-	-	Dry	N/A	5

Table 3.3 Surface Water Monitoring Results 2014

Parameter	Units	SW 1 October 2014	SW 1 November 2014	SW 1 December 2014	Trigger Levels	Emission Limit
pH	pH units			7.36	N/A	N/A
Temperature	°C			9.1	N/A	N/A
Conductivity	mS/cm			0.895	N/A	N/A
Total Ammonia	mg/l	4.23	1.17	1.60	N/A	N/A
BOD	mg/l			21	25	N/A
COD	mg/l			56	N/A	N/A
Total Suspended Solids	mg/l			56	35	N/A
Total Nitrogen	mg/l			5.7	N/A	N/A
Mineral Oils	mg/l			<0.01	N/A	5

3.2 Wastewater Monitoring

Waste water is generated from vehicle washing at the facility and from the floor of the MRF building. The wash water is directed to a silt trap and then to a petrol/oil interceptor before discharging to the municipal foul sewer.

The sampling and analysis was carried out in accordance with recognised quality assurance and control procedures. The range of analysis included BOD, COD, suspended solids, pH, ammoniacal nitrogen, sulphate, fats, oils and greases and detergents. The samples were compared to the ELVs set in the licence. The results, which are presented in Table 3.4, confirmed 100% compliance with the ELVs.

Table 3.4 Wastewater Monitoring Results 2014

Parameter	Units	February 2014	April 2014	June 2014	August 2014	October 2014	December 2014	Emission Limit
pH	pH units	6.37	5.97	6.42	6.6	6.85	6.98	6 – 10
Temperature	°C	7.1	11.3	13.8	12.1	7.6	8.1	42
Sulphate	mg/l	85.14	102.1	<0.05	56.6	<0.05	53.89	1,000
BOD	mg/l	468	331	22	269	79	47	3,000
COD	mg/l	725	677	3,770	544	244	310	6,000
Total Suspended Solids	mg/l	112	112	519	120	375	1,799	2,000
Oils, Fats & Greases	mg/l	<0.01	5.2	<0.01	7	<0.01	1.11	100
Ammoniacal Nitrogen	mg/l	6.65	3.64	83.26	48.06	38.75	1.44	100
Detergents (as MBAS)	mg/l	0.3	1.11	0.9	0.35	1.7	2.5	100

3.3 Noise Survey

The annual noise survey was conducted on the 16th June 2014 at three on-site, N-1, N-2 and N-3 as well as one off-site noise sensitive location, NSL-1. The ELV specified in the licence (55 dB (A)) LA_{eq} (30 minutes)) relates only to NSL-1. The full monitoring report was submitted to the Agency in 2014.

The survey was conducted when the site was fully operational and the results confirmed that the facility was in full compliance with its licence requirements. Noise emissions from the facility were not audible above at the nearest noise sensitive location. The results are included on Table 3.5.

Table 3.5 Noise Monitoring Results 2014

Station	Time	L _{Aeq} 30 min dB	L _{AF10} 30 min dB	L _{AF90} 30 min dB	Specific level* dB	Noise audible
N1	1531-1601	51	53	45	51	Greenstar loader and grab clearly audible when operating in building and yard areas. Occasional truck movements through yard area dominant when present. During quiet periods (becoming more common from 1545), noise emissions audible across commercial estate, chiefly traffic. Local birdsong. Aircraft audible using aerodrome. Sporadic activity audible at premises outside boundary.
N2	1457-1527	63	64	56	63	Almost continuous plant operation in Greenstar building (variously loader and grab) clearly audible and dominant. Occasional truck movements on yard dominant. Site bird scarer periodically audible. No other noise audible apart from small number of aircraft movements at/above aerodrome to N.
N3	1421-1451	55	58	50	55	Grab and loader dominant when operating in building. During occasional quiet periods, trucks on yard audible at low level. Offsite emissions from plant operating at adjacent premises clearly audible during quieter periods. No other noise audible apart from periodic Greenstar bird scarer emissions audible at low level during quieter periods.
NSL1	1612-1642	53	55	42	<42	No site emissions audible. Activity across commercial estate slightly audible from time to time. Vehicles on estate roadway and public road almost continuously audible. Intermittent aircraft activity at aerodrome significant. Bird song/calls.

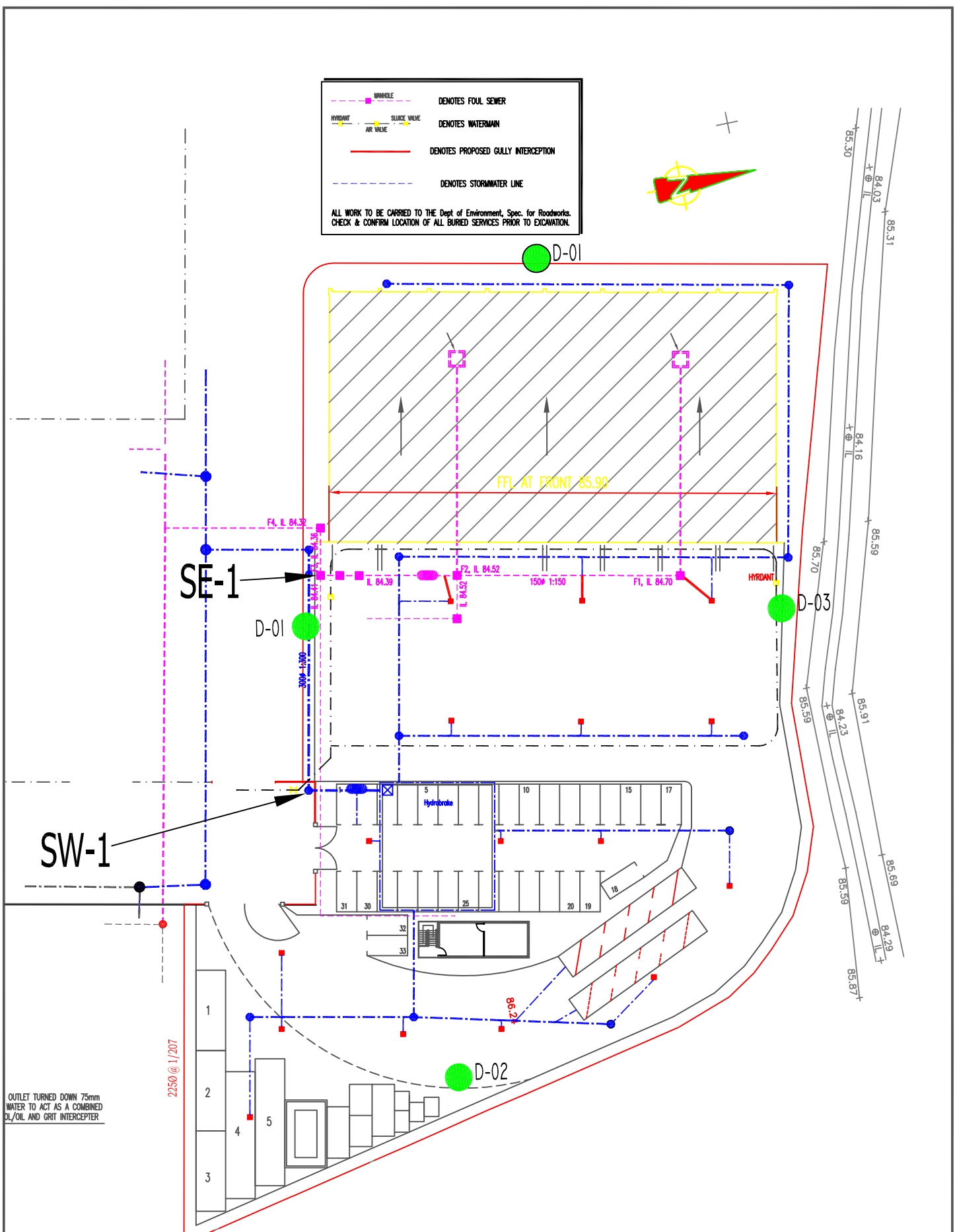
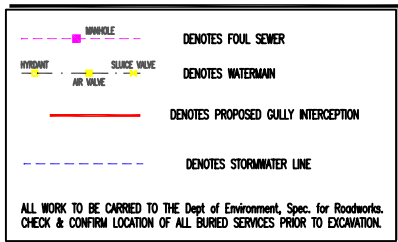
*Specific level: L_{Aeq} level considered attributable to facility during interval, determined using real time assessment, field notes, time history profiles, statistical analysis, frequency spectra, spectral statistics and near field correction if applicable.

3.4 Dust Monitoring

Dust monitoring was carried out on three occasions at four on-site locations (DS-01, DS-02, DS-03 and DS-04) in May, June and December 2014. The results of the monitoring are included on Table 3.6. There was 100% compliance with the dust deposition limit set in the licence (350 mg/m²/day).

Table 3.6 Dust Monitoring Results 2014

Location	May mg/m²/day	June mg/m²/day	December mg/m²/day	Dust Deposition Limit mg/m²/day
DS-01	36.7	35.5	9.2	350
DS-02	34.4	46.8	8.7	350
DS-03	33.9	52.8	9.9	350
DS-04	18.7	26.0	38.6	350



O'Callaghan Moran & Associates.
 Granary House, Rutland Street,
 Cork, Ireland.
 Tel. (021) 321521 Fax. (021) 321522
 email : info@ocallaghanmoran.com

environmental management for business

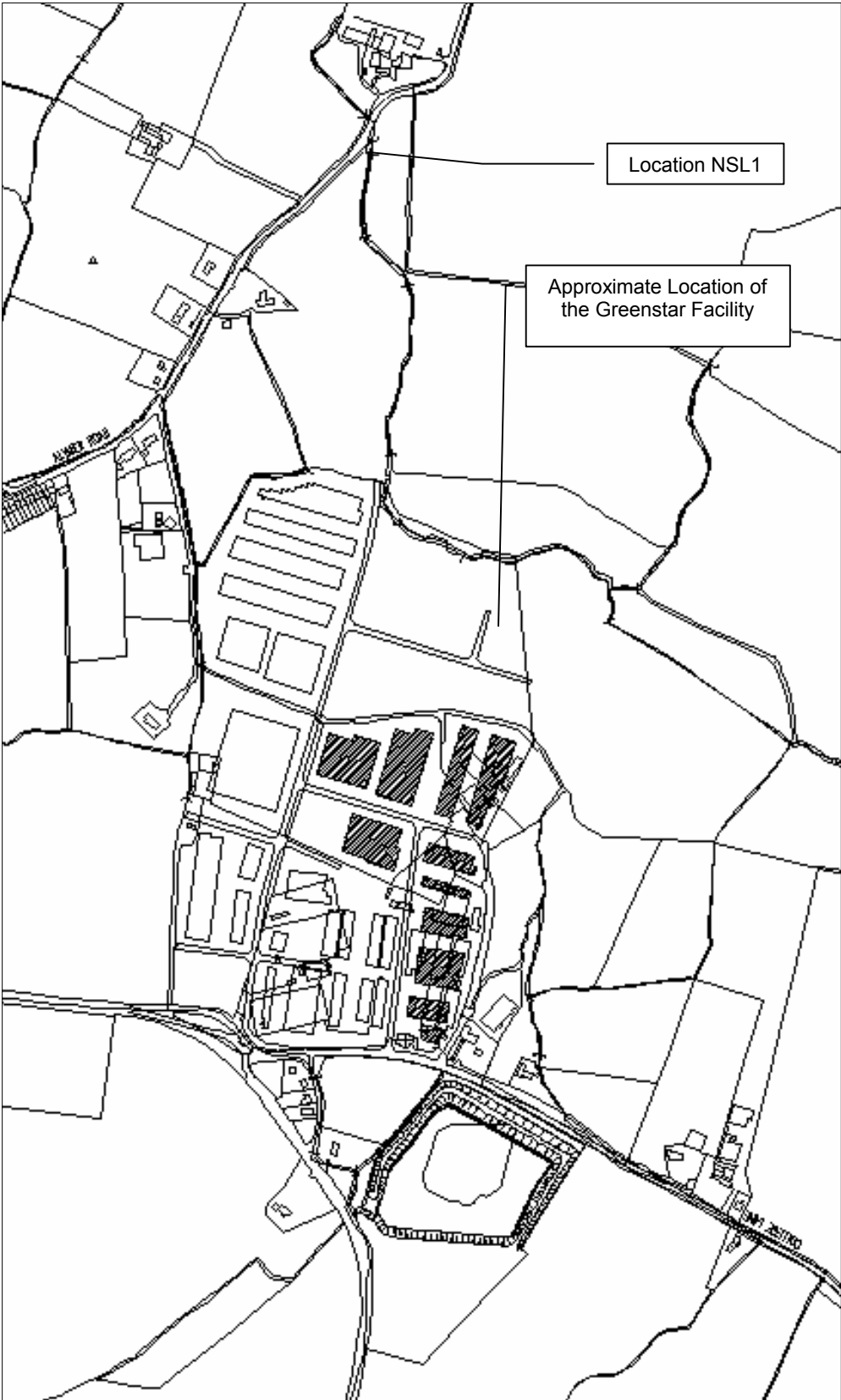
This drawing is the property of O'Callaghan Moran & Associates and shall not be used, reproduced or disclosed to anyone without the prior written permission of O'Callaghan Moran & Associates and shall be returned upon request.

CLIENT
Greenstar

TITLE
Monitoring Locations

DETAILS		DRG. No. 3.1	
SCALE	REV.	NTS	REV

Figure 3.2 – Noise Sensitive Location



4. SITE DEVELOPMENT WORKS

4.1 Specified Engineering Works

During the reporting period elevated ammonia levels had been detected in the surface water discharge from the site. The source of the ammonia was suspected to be a surface water gully located close an area of the yard which during heavy rain was receiving water from the bin wash area. The surface water gully was diverted from the surface water drainage system to the waste water drainage system in November 2014.

4.2 Summary of Resource & Energy Consumption

Table 4.1 presents an estimate of the resources used on-site during 2014 as well as 2013.

Table 4.1 Estimates of Resources Used On-Site – 2013 & 2014

Resources	Quantities 2013	Quantities 2014
Water	7,000 litres	7,200 litres
Diesel	47,803 litres	34,096 litres
Truck Wash	200kg	225kg
Engine Oil	280 litres	220 litres
Electricity	6,800 kWh	6,800 kWh

4.3 Tank & Pipeline Integrity Testing

Condition 3.11.8 of the licence requires tank, drum, pipeline and bund testing to be carried out every three years. Testing was not required in 2014 as Tobin Consulting Engineers carried out hydrostatic testing and a structural survey of 2 No. interceptors the 26th February 2013 and a detailed report was submitted to the Agency in March 2013.

Separately a CCTV survey of both the waste water and surface water drainage systems was carried out on the 18th April 2013 and bund integrity testing was completed in April 2013.

The findings were submitted to the Agency in May 2013. Pipelines were passed fit for purpose.

Integrity testing of all above ground bunds was completed in April 2013 compliance with Condition 3.10.5 of the Licence. Findings were that the integrity and water-tightness of each bund was sound and that each bund was fit for purpose. A report was submitted to the Agency.

5. WASTE RECEIVED AND CONSIGNED FROM THE FACILITY

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 2014 is presented in the PRTR submission in Appendix 1.

The total quantity of waste received was 61,854.75 tonnes and the total amount consigned was 61,526.2 tonnes. For comparative purposes the amounts of waste received and consigned from 2004 to 2014 are presented in Table 5.2 and Table 5.3. As per Condition 5.8 of the Licence, all the waste consigned from the site went to authorised recovery and disposal facilities and a copy of the relevant Facility Permit or Waste Licences retained on site for Agency inspection.

The records show that more waste was received at the site than was consigned from it. The difference was approximately 328 tonnes. The difference is due to waste which remained on site at the end of 2014 which will be consigned in 2015.

All the wastes consigned from the site went to authorised recovery and disposal facilities.

Table 5.1 Waste Received & Consigned 2014

EWC	Description	Waste In	Waste Out
080399	wastes not otherwise specified	0.20	
130503	interceptor sludge		22.30
150101	paper and cardboard packaging	2,416.46	2,421.70
150102	Plastic Packaging	13.46	38.13
150103	wooden packaging	82.12	588.76
150104	metallic packaging	4.67	
150105	Composite Packaging	8.06	
150106	mixed packaging	3,777.62	3,484.70
150203	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02	27.28	
170203	plastic	3.08	
170504	soil and stones other than those mentioned in 17 05 03	43.05	2,713.54
170802	gypsum-based construction materials other than those mentioned in 17 08 01	5.16	
170904	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	2,016.26	
190902	sludge from water clarification	11,363.80	11,157.28
190905	saturated or spent ion exchange resins	38.66	
191204	plastic and rubber	1.08	
191209	minerals (for example sand, stones)	132.68	
191210	combustible waste (refuse derived fuel)	4.40	
191212	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	36.43	15.72
200101	paper and cardboard	52.08	14.04
200102	glass	3.26	
200108	biodegradable kitchen and canteen waste	6,329.55	5,815.08
200138	wood other than that mentioned in 20 01 37	1,310.42	861.98
200139	plastics	31.86	4.82
200140	metals	272.09	296.96
200201	biodegradable waste	1,472.76	1,304.44
200301	mixed municipal waste	19,727.94	25,072.63
200303	street-cleaning residues	77.34	
200307	bulky waste	12,602.98	7,714.12
	Total Received	61,854.75	
	Total Consigned		61,526.20
	Recovery		39,395.72
	Disposal		22,130.48
	Recovery Rate (%)		64.03

Table 5.2 Waste Received & Consigned in 2013

EWC	Description	Waste In	Waste Out
110110	sludge and filter cakes other than those mentioned in 11 01 09	33.24	-
130503*	Interceptor Sludge	-	17.54
150101	paper and cardboard packaging	2,543.37	2,498.48
150102	plastic packaging	58.13	50.78
150103	wooden packaging	125.10	1,161.42
150104	metallic packaging	4.42	-
150105	composite packaging	25.48	-
150106	mixed packaging	4,643.90	4,626.24
150107	glass packaging	6.28	-
150203	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02	17.96	-
170201	Wood	27.66	-
170203	plastic	10.60	-
170504	soil and stones other than those mentioned in 17 05 03	10.52	475.48
170904	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	2,061.02	2,086.14
190902	sludge from water clarification	10,116.98	9,988.00
191209	C&D Inert Mixed	-	30.08
200101	paper and cardboard	24.68	-
200102	glass	4.13	-
200108	biodegradable kitchen and canteen waste	5,666.56	5,023.48
200138	wood other than that mentioned in 20 01 37	1,408.47	490.36
200139	plastics	36.24	-
200140	metals	407.73	449.34
200201	biodegradable waste	1,476.69	1,319.24
200301	mixed municipal waste	20,183.00	22,863.54
200307	bulky waste	12,423.51	10,035.74
	Total Received	61,315.67	
	Total Consigned		61,115.86
	Recovery		38,164.24
	Disposal		22,951.62
	Recovery Rate (%)		62.45

Table 5.3 Previous Waste Consignments

Description	Total Received	Total Consigned
2014	61,854.75	61,526.2
2013	61,315.67	61,115.86
2012	68,373.11	67,770.13
2011	67,199	66,913.50
2010	50,563.40	49,686.56
2009	52,472.47	52,051.49
2008	68,661.96	66,758.24
2007	63,481.24	60,776.28
2006	51,767.97	51,175.53
2005	1,540.48	1,400.66
2004	461.27	411.8

6. ENVIRONMENTAL INCIDENTS AND COMPLAINTS

6.1 Incidents

The level of total suspended solids detected in surface water sample collected in December was greater than the trigger level of 35mg/l for suspended solids. The level detected was 56mg/l. There was no source of the elevated levels identified. The result for suspended solids detected in the following round of monitoring (February 2015) was <10mg/l. An incident report was submitted to the Agency in December 2014.

The level of ammonia detected in surface water sample collected in August was considered to be elevated and warranted reporting to the Agency as an incident. The levels detected was 18.77mg/l. There is no trigger level or ELV established for ammonia. The elevated level was associated with cleaning works being carried out on the surface water drainage system in August 2014. The level of ammonia following the incident and the drainage works decreased significantly. An incident report was submitted to the Agency in December 2014.

There were no other reportable incidents on site in 2014.

6.2 Register of Complaints

Greenstar maintains a register of complaints received in accordance with Condition 10.4 of the waste licence. A copy of the complaint and response are retained on site.

Two complaints were received in the reporting period.

- A complaint was received in August 2014 relating to odour.
- A complaint was received in September 2014 relating to odour.

Following the complaints Greenstar reviewed the daily use of the odour suppression system. Greenstar maintained contact with complaints following the complaints.

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 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.

As part of this IMS Greenstar 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 2014 (Table 7.1), as well as the proposed Objectives and Targets for 2015 (Table 7.2) are presented below.

7.1.1 *Site Management Structure*

Management and Staffing structure: -

Name: Declan O'Reilly

Responsibility: Head of Leinster Collection Operations; overall responsibility for the running of the business including environmental compliance

Experience: 12 years working in the waste management industry and 16 years operational management experience; has completed the FÁS Waste Management Course

Name: James Sowray

Responsibility: Operations Manager; overall responsibility for the day to day site operations of the site including environmental compliance

Experience: 12 years working in operations management; has completed the FAS Management Course

Name: Jonathon O’Keeffe (Nominated Deputy)

Responsibility: Dispatch Manager

Experience: 10 years working in waste management; has completed the FAS Management Course

7.1.2 Staff Training

Environmental awareness training was carried out on site in 2014. The Site Supervisor rescheduled to complete “FAS” course in 2015. This was postponed in 2014 due to illness.

7.2 Environmental Management Programme Progress Report & Proposal

7.2.1 Schedule of Objectives 2014 –Progress Report

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

7.2.2 Schedule of Objectives 2015 – Proposal

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

Table 7.1 Schedule of Objective and Targets 2014

No	Objective	Target	Responsibility	Timescale
1	Pollution Prevention	Strive to ensure that monitoring results comply with the licence limits and investigate any exceedances of emission limit values.	Site Management	Civil works carried out and weekly sampling on going.
2	Development and adoption of Fire Prevention Procedure at the facility	Reduce risk of fire and enable early detection.	Site Management/EHS	New fire detection system fitted in Dec 2014
3	Review of Emergency Response Plan to incorporate fire prevention procedure and new structure	Revision of Plan and additional training for site personnel	Site Management/EHS	Ongoing
4	Achieve re-certification to ISO 14001 and OHSAS 18001 standard	3 year certification period expires in 2014.	Site Management/EHS	Group recertification achieved in July 2014, surveillance audit due on site.
5	Waste Storage	Review waste storage inside the facility to avoid contamination	Site Management	Concrete dividers installed and review underway to assess further

				requirements
6	Odour Management	Continue to monitor odour coming from the site. Work with neighbouring sites as well as the management company	Site Management	Ongoing
7	Trigger/Warning Levels	Develop trigger/warning levels of the surface water discharge form the site.	Site Management	Ongoing - Sampling weekly from SW1 for ammonia ongoing to complete trigger level setting.
8	Develop and maintain traffic management plan at the facility	Review of all on-site traffic management	Site Management	Complete
9	Environmental Training of Facility Staff	Update training presentation and ensure training of key managerial staff	Site Management	Ongoing
10	Site Signage	Facility Notice Boards to be replaced to reflect new ownership DONE	Site Management	Complete

Table 7.2 Schedule of Objective and Targets 2015

No.	Objective	Target	Timescale	Responsibility
1	Document a Preventative Maintenance (PM) plan for the inspection and cleaning of plant & equipment wrt fire	Incorporate into existing Site Inspection Database (EF-10A) and site specific PM plans	Q1-Q2	Site Management/EHS
2	Document PM plan for all hardstand and drainage infrastructure on site	Incorporate into existing Site Inspection Database (EF-10A)	Q1-Q2	Site Management/EHS
3	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	Q2-Q3	EHS/Finance/WIMS
4	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. Apply for funding for additional odour suppression infrastructure if necessary	Q1-Q2	Site Management/EHS
5	Track Energy Usage on site	Record electricity, gas, water and fuel consumption on site group wide	Q2-Q3	Site Management/EHS
6	Review Bird Control Measures	Re-assess current bird control measures and implement additional if necessary	Q2-Q3	Site Management/EHS
7	Environmental Training	Site supervisor to complete “FAS” course	Q3	Site Management/EHS
8	Setting of Surface Water trigger levels	Complete surface water investigation and submit required data and proposed trigger level to EPA for approval	Q2-Q3	Site Management/EHS

7.3 Communications Programme

Greenstar are 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 make the policy and records 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 environmental information at the facility.

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 9 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 Controls

Greenstar has contracted a vermin control company Rentokil to carry out nuisance control at the facility. Rentokil assess vermin activity on-site, along with an inspection of the bait traps that are located throughout the facility. Records are maintained onsite.

Greenstar implemented additional bird control measures in 2012. A speaker system is in operation at the facility as is a bird repellent kite which is situated on the boundary fence, a second repellent kite was sourced and introduced into the bird control programme in Quarter 2 2012. These measures have proved effective during this reporting period in keeping the numbers of birds at the site to a minimum. Greenstar work with Bird Control Ireland who manage the bird control in Baldoyle airfield.

Greenstar installed an odour suppression system in 2011 and the system has been working efficiently since installed. The system was reviewed and adjusted in August and September 2014 following odour complaints from neighbouring properties.

7.5 Waste Recovery Report

The facility is designed to increase the recycling of biodegradable materials and reduce the volume of waste disposed to landfill. Of the 61,526 tonnes of waste consigned from the facility approximately 64% was sent for recovery.

7.6 ELRA & Report on Financial Provision

A Decommissioning Management Plan (DMP) and Environmental Liabilities Risk Assessment (ELRA) including Financial Provision (FP) were submitted to the Agency in 2013. Both the DMP and ELRA have been approved by the Agency.

7.7 Wastewater Volume Produced and Transported Off-Site

Wastewater (truck wash and MRF floor) is directed to a silt trap and then to a petrol/oil interceptor before discharging to the municipal sewer. It is estimated that approximately 2,000 m³ of wastewater was discharged to the sewer during the reporting period. During the year 22.3 tonnes of waste was also removed from the facility following the cleaning out of the interceptors on site.

8. OTHER REPORTS

8.1 European Pollutant Release and Transfer Register

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

APPENDIX 1

European Pollutant Release and Transfer Register

[Guidance to completing the PRTR workbook](#)

AER Returns Workbook

Version 1.1.18

REFERENCE YEAR	2014
-----------------------	------

1. FACILITY IDENTIFICATION

Parent Company Name	Starrus Eco Holdings Limited
Facility Name	Starrus Eco Holdings Limited (Greenogue)
PRTR Identification Number	W0188
Licence Number	W0188-01

Classes of Activity

No.	class_name
-	Refer to PRTR class activities below

Address 1	14B Phase 3
Address 2	Road 3A
Address 3	Greenogue Industrial Estate
Address 4	Rathcoole
	Dublin
Country	Ireland
Coordinates of Location	-6.46619 53.2936
River Basin District	IEEA
NACE Code	3832
Main Economic Activity	Recovery of sorted materials
AER Returns Contact Name	Malcolm Dowling
AER Returns Contact Email Address	malcolm.dowling@greenstar.ie
AER Returns Contact Position	Group Compliance Manager
AER Returns Contact Telephone Number	012947976
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	8
User Feedback/Comments	Higher levels of BOD, TSS, FOG, Ammonia and Detergents were detected in the waste water discharge when compared to 2013. All emission were within the limits set out in the waste licence in the reporting period.
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?	
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) ?	
--	--

This question is only applicable if you are an IPPC or Quarry site

4.1 RELEASES TO AIR

[Link to previous years emissions data](#)

| PRTR# : W0188 | Facility Name : Starrus Eco Holdings Limited (Greenogue) | Filename : W0188_2014.xls | Return Year : 2014 |

31/03/2015 16:12

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

POLLUTANT		RELEASES 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		RELEASES 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		RELEASES 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 (Greenogue)

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#: W0188 | Facility Name : Starrus Eco Holdings Limited (Greenogue) | Filename : W0188_2014.xls | Return Year : 2014 |

31/03/2015 16:12

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 this only

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

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

SECTION B : REMAINING PRTR POLLUTANTS

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

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

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

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

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

4.3 RELEASES TO WASTEWATER OR SEWER

[Link to previous years emissions data](#)

| PRTR# : W0188 | Facility Name : Starrus Eco Holdings Limited (Greenogue) | Filename : W0188_201

31/03/2015 16:12

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 Code	Method Used Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

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

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

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
Pollutant No.	Name	M/C/E	Method Code	Method Used Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
238	Ammonia (as N)	M	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited	60.6	60.6	0.0	0.0
303	BOD	M	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited	405.33	405.33	0.0	0.0
306	COD	M	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited	2090.0	2090.0	0.0	0.0
308	Detergents (as MBAS)	M	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited	2.28	2.28	0.0	0.0
314	Fats, Oils and Greases	M	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited	8.8733	8.8733	0.0	0.0
343	Sulphate	M	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited	148.865	148.865	0.0	0.0
240	Suspended Solids	M	PER	Based on an estimate of water used in the wheel wash. Analysis is ISO accredited	1012.33	1012.33	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# : W0188 | Facility Name : Starrus Eco Holdings Limited (Greenogue) | Filename : W0188_2014.xls | Return Year : 2014 |

31/03/2015 16:12

SECTION A : PRTR POLLUTANTS

POLLUTANT		RELEASES 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		RELEASES 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# : W0188 | Facility Name : Starrus Eco Holdings Limited (Greenogue) | Filename : W0188_2014.xls | Return Year : 2014 |

31/03/2015 16:12

Please enter all quantities on this sheet in Tonnes

3

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		Non	Non Haz Waste: Address of Recoverer/Disposer		
Within the Country	13 05 03	Yes	22.3	interceptor sludges	R13	M	Weighed	Offsite in Ireland	Rita Environmental Ltd ,W0192-03 Greenogue Business Park Rathcoole Co Dublin ,ireland	Greenogue Business Park ,Rathcoole ,Co Dublin ,,ireland Bray Depot,Fassaroe,Bray,Co Wicklow,Ireland	Rita Environmental Ltd ,W0192-03,Greenogue Business Park ,Rathcoole ,Co Dublin ,,ireland	Greenogue Business Park ,Rathcoole ,Co Dublin ,,ireland
Within the Country	15 01 01	No	1057.84	paper and cardboard packaging	R13	M	Weighed	Offsite in Ireland	Greenstar Ltd,W0053-03	Millennium Park,Ballycoolin, Dublin 11,,Ireland		
Within the Country	15 01 01	No	16.22	paper and cardboard packaging	R13	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd,W0183-01	Rosemount,,Ballycoolin,Dubl in 11,Ireland		
Within the Country	15 01 01	No	1195.56	paper and cardboard packaging	R13	M	Weighed	Offsite in Ireland	Bailey Waste Recycling (Greenstar Ltd),WPT-FG-08-0002-01	Unit 2B Kylemore Industrial Estate,Killen Road,Ballyfermot,Dublin 10,Ireland		
Within the Country	15 01 01	No	152.08	paper and cardboard packaging	R13	M	Weighed	Offsite in Ireland	Rebox Recycling,CP D95/1 Bailey Waste Recycling (Greenstar Ltd),WPT-FG-08-0002-01	Rosemount,,Ballycoolin,Dubl in 11,Ireland		
Within the Country	15 01 02	No	20.58	plastic packaging	R13	M	Weighed	Offsite in Ireland	Leinster Environmental/Eco WM Ltd ,WFP-LH-09-0004-01 Dundalk Louth - - ireland	Dundalk,Louth,-,ireland Bray Depot,Fassaroe,Bray,Co Wicklow,Ireland		
Within the Country	15 01 03	No	531.86	wooden packaging	R3	M	Weighed	Offsite in Ireland	Greenstar Ltd,W0053-03	Johnston Bridge,Enfield,Co Meath,,Ireland		
Within the Country	15 01 03	No	56.9	wooden packaging	R3	M	Weighed	Offsite in Ireland	Max Pallet Services Ltd,Licence - exempt	Ballymount Cross,Tallaght,Dublin 24,- ,ireland		
Within the Country	15 01 06	No	375.24	mixed packaging	R13	M	Weighed	Offsite in Ireland	Panda,W039-02			

Within the Country	15 01 06	No	3109.46 mixed packaging soil and stones other than those mentioned	R13	M	Weighed	Offsite in Ireland	Greenstar Ltd,W0053-03	Bray Depot,Fassaroe,Bray,Co Wicklow,Ireland
Within the Country	17 05 04	No	165.74 in 17 05 03 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	Kilbracken,COR-LS-09-001-01	Kilbracken,Fisherstown,County Laois,,ireland
Within the Country	17 09 04	No	2547.8	R13	M	Weighed	Offsite in Ireland	Greenstar Ltd,W0053-03	Bray Depot,Fassaroe,Bray,Co Wicklow,Ireland
Within the Country	19 09 02	No	6778.62 sludges from water clarification	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd.,W0165-02	Ballynagran,Coolbeg & Kilcandra,Co. Wicklow,,Ireland
Within the Country	19 09 02	No	29.48 sludges from water clarification	R3	M	Weighed	Offsite in Ireland	Enrich Environmental ,WMP 2004/57	Kilcock,Co. Kildare,,Ireland
Within the Country	19 09 02	No	4349.18 sludges from water clarification other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D5	M	Weighed	Offsite in Ireland	Greenstar Ltd ,W0146-01	Knockharley Landfill ,Kentstown ,Co Meath ,,ireland
Within the Country	19 12 12	No	15.72	R13	M	Weighed	Offsite in Ireland	Greenstar Ltd,W0053-03	Bray Depot,Fassaroe,Bray,Co Wicklow,Ireland
Within the Country	20 01 01	No	14.04 paper and cardboard	R3	M	Weighed	Offsite in Ireland	Bailey Waste Recycling (Greenstar Ltd),WPT-FG-08-0002-01	Rosemount,,Ballycoolin,Dublin 11,Ireland
To Other Countries	20 01 08	No	87.92 biodegradable kitchen and canteen waste	R3	M	Weighed	Abroad	Granville Eco Park,P0413/12A	Dungannon,Tyrone,-,ireland
Within the Country	20 01 08	No	3051.64 biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	Clonmel Waste Disposal Ltd ,WP-008-02	Lawesstown , Clonmel ,Co. Tipperary -,ireland -Ballynalurgan
Within the Country	20 01 08	No	2649.9 biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	Thomtons Kilmainhamwood Compost ,W0195-02	,Kilmainhamwood , Kells Co Meath,ireland
Within the Country	20 01 08	No	25.62 biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	Waddock Composting,WP 11/04	Killamaster,Co. Carlow,,Ireland
Within the Country	20 01 38	No	292.86 wood other than that mentioned in 20 01 37	R3	M	Weighed	Offsite in Ireland	Clonmel Waste Disposal Ltd ,WP-008-02	Lawesstown , Clonmel ,Co. Tipperary -,ireland
Within the Country	20 01 38	No	569.12 wood other than that mentioned in 20 01 37	R3	M	Weighed	Offsite in Ireland	Greenstar Ltd,W0053-03	Bray Depot,Fassaroe,Bray,Co Wicklow,Ireland
Within the Country	20 01 39	No	4.82 plastics	R3	M	Weighed	Offsite in Ireland	Bailey Waste Recycling (Greenstar Ltd),WPT-FG-08-0002-01	Rosemount,,Ballycoolin,Dublin 11,Ireland
Within the Country	20 01 40	No	120.36 metals	R4	M	Weighed	Offsite in Ireland	Davis Recycling Ltd.,W0134-01	10 The Anchorage Business Park,Charlotte Quay,Dublin 4,,Ireland

										ClearCircle Metals (Limerick) Ltd
Within the Country	20 01 40	No	20.94 metals	R4	M	Weighed	Offsite in Ireland	Clearcircle,WCP-LK-08-589-01	,Ballysimon Road ,Limerick,,ireland	
Within the Country	20 01 40	No	155.66 metals	R4	M	Weighed	Offsite in Ireland	Multi Metals Recycling Ltd,WFP-WW-09-0014-01	Blessington,Co Wicklow,,,,ireland	
Within the Country	20 02 01	No	789.08 biodegradable waste	R3	M	Weighed	Offsite in Ireland	Bord na Mona Composting ,W0198-01	Kilberry Athy ,Co Kildare,-, ,ireland	
Within the Country	20 02 01	No	314.68 biodegradable waste	R3	M	Weighed	Offsite in Ireland	Clonmel Waste Disposal Ltd ,WP-008-02	Lawlesstown , Clonmel ,Co. Tipperary -, ,ireland	
Within the Country	20 02 01	No	200.68 biodegradable waste	R3	M	Weighed	Offsite in Ireland	Enrich Environmental ,WMP 2004/57	Kilcock,Co. Kildare,, , ,ireland	
Within the Country	20 03 01	No	5622.54 mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Bord Na Mona PLC,W0201-03	Drehid Landfill,Drehid ,Co. Kildare,, ,ireland	
Within the Country	20 03 01	No	5126.44 mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd ,W0165-02	Ballynagran,Coolbeg & Kilcandra,Co. Wicklow,, ,ireland	
Within the Country	20 03 01	No	5192.48 mixed municipal waste	R1	M	Weighed	Offsite in Ireland	Indaver IWMF ,W0167-02 Carranstown Duleek Co Meath - ireland	Carranstown ,Duleek,Co Meath, -, ,ireland	
Within the Country	20 03 01	No	253.7 mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Greenstar Ltd ,W0146-01	Knockharley Landfill ,Kentsown ,Co Meath ,, ,ireland	
Within the Country	20 03 01	No	932.4 mixed municipal waste	R13	M	Weighed	Offsite in Ireland	midland waste,W0131-02	Navan,-, ,county meath,ireland	
Within the Country	20 03 01	No	526.08 mixed municipal waste	R13	M	Weighed	Offsite in Ireland	O'Toole Composting,W01/07	Ballinrane,Co. Carlow,, , ,ireland	
Within the Country	20 03 01	No	228.98 mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Oxigen Environmental Limited,W-0208-1	Ballymount Industrial Estate ,Ballymount Road Lower ,Clondalkin ,Dublin 22,ireland	
Within the Country	20 03 01	No	7190.01 mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Panda,W039-02	Ballymount Cross,Tallaght,Dublin 24,- ,ireland	
Within the Country	20 03 07	No	4862.32 bulky waste	R13	M	Weighed	Offsite in Ireland	Greenstar Ltd,W0053-03	Bray Depot,Fassaroe,Bray,Co Wicklow,Ireland	
Within the Country	20 03 07	No	2851.8 bulky waste	R13	M	Weighed	Offsite in Ireland	Greenstar Holdings Ltd,W0163-01	Millennium Park,Ballycoolin, Dublin 11,, ,ireland	

APPENDIX 2

Procedures List



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

Integrated Procedures - IP

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

Safety Procedures - SP

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



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