

Starrus Eco Holdings Ltd.

**Annual Environmental
Report (AER) 2017**

**Greenogue MRF,
Rathcoole, County Dublin
Licence: W0188-01**

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Section 1 Introduction

1.1 Reporting Period

This is the 2017 Annual Environmental Report (AER) for the Starrus Eco Holdings Ltd (SEHL), Waste Transfer facility (WTF) at Site 14B, Phase 3, Road 3A, Greenogue Industrial Estate, Rathcoole, Co. Dublin. It covers the period from 1 January 2017 to 31 December 2017.

1.2 IED Licence

On 27 November 2015, the waste Licence W0188-01 was amended by the EPA and deemed to be an industrial emissions Licence (IED) granted under Part IV of the Environmental Protection Act 1992 as amended.

Section 2 Site Description

2.1 Site Location

SEHL operate a waste material transfer facility (MRF) at the Greenogue Business Park in Rathcoole, County Dublin. The facility is located in Greenogue Business Park in Rathcoole, approximately 12 km west of Tallaght and occupies an area of 0.603 hectares (ha). The surrounding area is characterised by a mixture of agricultural, recreational, residential, commercial and industrial land use.

2.2 Licenced Waste Activities

The facility is currently licensed to accept and process up to 95,000 tonnes of waste per annum, comprising municipal waste, commercial waste, industrial waste and construction and demolition waste. All waste processing takes place inside the waste transfer building, as specified in Condition 5 of the Licence.

2.2.1 Waste Types

The licensed waste types and quantities under Schedule A of the Licence are:

Table 1 Waste Acceptance Categories & Quantities at Greenogue

Waste Type	Maximum (tonnes per annum)
Municipal	15,000
Commercial	37,500
Industrial	37,500
Construction & Demolition	5,000
Total	95,000

The quantities of the above listed individual waste types may be adjusted with the prior agreement of the Agency, subject to the total maximum tonnage remaining the same.

No hazardous wastes or liquid wastes are accepted at the facility.

2.2.2 Waste Processing

The main processes carried out at the facility are:

- The bulking up of municipal wastes (mixed municipal waste and dry mixed recyclables) for further recovery or disposal at separate licensed facilities;
- The separation of C&I waste into different waste streams (paper, cardboard, glass, metal, green waste and wood) for further recovery at separate licensed facilities; and
- The separation of C&D waste into clean and dirty waste streams for further recovery at separate licensed facilities.

All waste accepted at the facility is unloaded within the 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.

Municipal Waste

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

SEHL 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 appropriate licensed recycling facilities.

Commercial and Industrial (C&I) 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 authorised facilities.

Biodegradable waste is stored separately in a sealed container prior to dispatch to an authorised treatment facility.

Construction and Demolition (C&D) 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.

2.2.3 Plant and Machinery List

A list of the plant and machinery in use at the facility is presented in Table 2. The plant provides 100% duty capacity and 50% standby capacity for waste processing.

Table 2 Existing Onsite Plant and Machinery

No.	Plant	Model	Operational Capacity
1	Loading Shovel	Volvo L1-20E	70 t/hr
1	Fork Lift	Toyota	60 hr/wk
1	Grab	Fuchs	70 t/hr
1	Weighbridge – 2 scale	Avery Berkel	60

Section 3 Emissions Monitoring

The monitoring required for the facility includes surface water, wastewater, dust and noise. All environmental emission monitoring is carried out at the specified intervals and frequency specified in schedule D of the Licence, while reports presenting the results of this monitoring are also submitted to the Agency at various frequencies, in accordance with Schedule E of the Licence (Table 3).

Table 3 Emission Monitoring and Reporting Frequencies

Medium	Monitoring Frequency	Reporting Frequency
Surface Water	Quarterly	Quarterly
Wastewater	Every two months	Quarterly
Dust	Three times a year	Three times a year
Noise	Annually	Annually

Monitoring locations are shown on Drawing FIG 001 in Appendix 1. An overview of the results of monitoring carried out at the facility in 2017 is presented in this chapter.

3.1 Surface Water Monitoring

Surface water run-off is confined to run-off from the roofed area of the waste transfer building and some of the paved yards. It is completely dependent on rainfall. The surface water is treated by a Class 1 petrol/oil interceptor prior to discharge to the industrial park drainage system.

3.1.1 Monitoring Locations

Quarterly surface water monitoring of all parameters was carried out at the surface water monitoring point SW-1, as shown on Drawing FIG 001.

Monitoring of ammonia at SW-1 was carried out on a weekly basis (rainfall dependent) during 2016 and 2017 as elevated ammonia levels were recorded in the surface water discharge from the site during 2014. A reduction in recorded ammonia levels has been noticeable from the weekly monitoring undertaken in 2016. This reduction was likely due to works which were carried out in August 2016 which included the cleaning out of and diversion from a redundant silt trap which was discharging to SW-1. The water flowing through this silt trap was suspected to have been a potential source of the elevated ammonia levels recorded during early 2016.

3.1.2 Monitoring Parameters and Analysis

Monitoring and analysis was carried out for the parameters listed in Schedule D of the Licence.

The surface water analysis for 2017 was carried out by ALS laboratories.

3.1.3 Monitoring Results

The results for Q1, Q2, Q3 and Q4 in 2017 are presented in Table 4. Trigger levels and Emission Limit Values (ELVs) set out in the Licence are also included in Table 4.

Table 4 SW-1 Surface Water Monitoring Results 2017

Parameter	Units	Q1	Q2	Q3	Q4	Trigger Levels	Emission Limit
Visual Inspection	mg/l	Clear	Clear	Clear	Clear	NA	NA
pH	mg/l	7.7	7.6	7.5	7.3	NA	NA
BOD	mg/l	2	3	9	8	25	NA
Total Suspended Solids	mg/l	24	20	17	23	35	NA
Mineral Oil	mg/l	1.28	0.2258	0.598	0.256	NA	5
Total Nitrogen	mg/l	2.3	6.1	8.3	2.9	NA	NA
Ammonia	mg/l	1.8	3.4	1.0	0.6	NA	NA
Ammoniacal Nitrogen	mg/l	1.53	2.77	0.87	0.5	NA	NA
COD	mg/l	25	21	19	40.0	NA	NA
Electrical Conductivity	µS/cm	411	512	501	617	NA	NA
Temperature	°C	10.1	11.2	10.9	9.6	NA	NA

N/A = None Available

NS = no sample due to low rainfall

3.1.4 Results Interpretation

The level of ammonia detected at SW-1 decreased between 2016 and 2017. SEHL have implemented yard cleaning measures that are contributing to improved surface water quality.

3.2 Wastewater Monitoring

Wastewater is primarily generated from vehicle and wheelie bin washing at the facility. Some wastewater is also generated from the floor of the MRF building. All wastewater is directed to a silt trap and then to a petrol/oil interceptor, before entering the municipal sewer system.

3.2.1 Monitoring Locations

Bi-monthly sewer monitoring was carried out at the monitoring point SE-1, as shown on Drawing FIG 001.

3.2.2 Monitoring Parameters

Monitoring and analysis was carried out for the parameters listed in Schedule D of the Licence.

The full wastewater laboratory analysis was carried out by ALS laboratories.

3.2.3 Monitoring Results

The results for 2017 are presented in Table 5. ELVs set out in the Licence are also included in Table 5.

Table 5 SE-1 Wastewater Monitoring Results 2017

Parameter	Units	Feb-17	Apr-17	Jun-17	Aug-17	Oct-17	Dec-17	Emission Limit
pH	pH units	7.26	8.15	6.89	7.32	7.34	7.56	6.0-10.0
Conductivity	mS/cm	0.659	0.789	0.956	0.656	0.869	0.689	N/A
Temperature	°C	10.2	10.1	11.2	10.8	10.1	9.6	-
Ammoniacal Nitrogen	mg/l	50.5	77	28	1.44	1.75	0.83	100
Anionic surfactants	mg/l	<0.21	0.93	1.42	0.24	0.28	<0.21	100
BOD settled	mg/l	63	297	259	19	21	16	3,000
COD	mg/l	688	978	834	423	470	71	6,000
Oils, fats and greases	mg/l	25.6	37.1	36.5	14.5	43.0	40.9	100
pH	mg/l	7.8	8.3	7.0	7.1	7.2	7.4	6 - 10
Sulphate	mg/l	21.5	50.4	90.4	39.1	59.7	30.7	1,000
Total Suspended Solids	mg/l	1,960	8.06	26	40.4	34.3	18.2	2,000

N/A = None Available

3.2.4 Interpretation of Results

All levels detected in the reporting period were within the ELVs.

3.3 Noise Monitoring

Damian Brosnan Acoustics undertook annual noise monitoring on 11 August 2017. The monitoring was undertaken to measure and assess noise levels in accordance with Schedule D3 of the Licence. The measurements recorded have been used to determine compliance with the noise emission limits specified in Schedule C1 of the Licence. The noise emission limit specified in the Licence only applies to noise sensitive locations, with levels recorded at boundary locations not required to meet this limit.

Condition 6.5 of the Licence states that *“There shall be no clearly audible tonal component or impulsive component in the noise emissions from the activity at the noise sensitive locations.”*

Night-time monitoring was not carried out as the site is not operational during night-time hours and does not generate noise emissions during these hours.

3.3.1 Monitoring Locations

Daytime noise monitoring was undertaken at the four locations presented on Drawing FIG 001. The monitoring locations include three onsite locations (N-1, N-2 and N-3) and one off-site noise sensitive location (NSL-1) as set out in Schedule D of the Licence.

3.3.2 Monitoring Results

Results of the noise monitoring carried out are summarised in Table 6.

Table 6 Noise Monitoring Results 2017

Location	Sample Time	Daytime			
		L _{Aeq, 30 min} (dB)	L _{A10, 30 min} (dB)	L _{A90, 30 min} (dB)	Specific L _{A90, 30 min} (dB)
N1	11/08/2017 10:02-10:32	59	60	52	59
N2	11/08/2017 09:27 – 09:57	71	74	62	71
N3	11/08/2017 08:52 – 09:22	57	59	50	56
NSL1	11/08/2017 08:07 – 08:37	52	54	48	<47

3.3.3 Results Interpretation

Measured LAeq 30 min levels at the three onsite stations N1, N2 and N3 were 59, 71 and 57 dB respectively. Levels were dominated by plant and truck activity onsite and LAeq 30 min levels are considered representative of site emissions at N1 and N2. At N3, the site specific level was 56 dB. Noise limits specified in licence W0188-01 do not apply to the boundary measurement stations. The LAeq 30 min level recorded at the offsite station NSL1 was 52 dB. The noise environment at this location, which is approximately 430 m northwest of the facility, was heavily influenced by several noise sources, chiefly local traffic. SEHL emissions were inaudible, and it is concluded that site emissions did not exceed the 55 dB daytime limit specified in licence W0188-01. SEHL operations did not give rise to tones or impulses at NSL1, thus complying with condition 6.5 of the licence.

3.4 Dust Monitoring

Dust monitoring was carried out on three occasions in 2017. The Licence requires a minimum of three yearly monitoring events to take place. The three monitoring events took place in August, September and December 2017. The measurements recorded have been used to determine compliance with the dust emission limit (350 mg/m²/d) specified in Schedule C2 of the Licence.

Bergerhoff style gauges were used to determine total dust deposition levels at the site. Four gauges were set up so that the dust jars were at a height of at least 1.5 m above the ground and the jars were set in place during the monthly monitoring event. The samples were submitted to City Analysts Laboratories Ltd. for analysis of dust contents.

3.4.1 Monitoring Locations

The dust monitoring was carried out at four on-site locations (DS-01, DS-02, DS-03 and DS-04) in 2017. The locations of these monitoring points are shown on drawing FIG 001.

3.4.2 Monitoring Results

The results for organic, inorganic and total dust deposition for the three monitoring events which took place in August, September and December are presented in Table 7, Table 8, and Table 9 respectively. The dust emission limit set out in the Licence is also included in these tables.

Table 7 Dust Monitoring Results August 2017

Sampling Point	Total Dust	Organic Dust	Inorganic Dust
	August 2017		
	mg/m ² /day		
DS-01	*	*	*
DS-02	52.76	16.8	35.96
DS-03	117.59	59.69	116.9
DS-04	277.66	78.86	198.8
Limit			350

* - Sample contaminated by bird excrement

Table 8 Dust Monitoring Results September 2017

Sampling Point	Total Dust	Organic Dust	Inorganic Dust
	September 2016		
	mg/m ² /day		
DS-01	69.9	42.81	27.1
DS-02	93.91	26.09	67.83
DS-03	19.41	10.66	8.75
DS-04	85.22	62.67	22.55
Limit			350

Table 9 Dust Monitoring Results December 2017

Sampling Point	Total Dust	Organic Dust	Inorganic Dust
	December 2016		
	mg/m ² /day		
DS-01	85.11	43.87	41.23
DS-02	39.38	16.16	23.23
DS-03	49.82	31.70	18.12
DS-04	51.89	28.33	26.56
Limit			350

3.4.3 Interpretation of Results

No exceedances of the dust deposition limit of 350 mg/m²/day were evident from the monitoring which took place during the 2017 reporting year.

Section 4 Site Development Works

4.1 Specified Engineering Works

No specified engineering works in accordance with those listed in Schedule B of the Licence were carried out during the 2017.

4.2 Summary of Resource & Energy Consumption

Resources consumed at Greenogue MRF include water, diesel fuel, truck wash detergent, engine oil and electricity. Table 10 presents an estimate of the resources used on-site during 2017 as well as 2016.

Table 10 Estimates of Resources used on site – 2016 & 2017

Resource	Quantities used 2016	Quantities used 2017
Water	7000 litres	6700 litres
Diesel	35,410 litres	30,000 litres
Engine Oil	250 litres	200 litres
Electricity	8644 kWh	9902 kWh

4.3 Tank & Pipeline Integrity Testing

Condition 3.11.8 of the Licence requires that tank, drum, pipeline and bund testing is carried out onsite every three years.

Bund testing was undertaken in 2017. The testing indicated that all bunds tested were fit for purpose.

Section 5 Waste Received and Consigned from the Facility

The waste processing which takes place at the facility and the maximum quantity of waste which may be processed at the facility are outlined in Section 2 of this document.

A detailed description of the wastes received and consigned in 2017 is presented in the PRTR submission in Appendix 3.

Table 11 shows the quantities of wastes accepted and consigned for the reporting period. The total quantity of waste accepted was 42,588.5 tonnes and the total amount consigned was 41,746.7 tonnes. The records show that slightly more waste was received at the site than was consigned from it. The difference is due to waste which remained onsite at the end of 2017 which will be consigned in 2018.

For comparative purposes, the quantity of waste received and consigned from 2004 to 2017 is presented in Table 13.

As per Condition 5.8 of the Licence, all waste consigned from the site went to authorised recovery and disposal facilities. A copy of the relevant Facility Permit or Waste Licenses is retained on site for Agency inspection.

Table 11 Waste Received & Consigned 2017

EWC	Description	Waste In (tonnes)	Waste Out (tonnes)
130503	Interceptor sludges		4.34
150101	Paper and cardboard packaging	199.83	
150102	Plastic packaging	10.315	
150103	Wooden packaging	6.17	28.7
150106	Mixed packaging	282.766	132.84
150109	Textile	6.88	
160504	Pressurised gas containers		1.98
170201	Wood		38.38
170405	Metal	10.34	
170504	Soils and stones other than those mentioned in 17 05 03	41.02	1674.18
170802	Gypsum-based construction materials	27.06	
170904	Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	7045.615	5642.441
190801	Screenings	144.98	77.88
190902	Sludge from water clarification	2779.82	2788.56
190905	Saturated or spent ion exchange resins	58.82	
191212	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	1.74	2997.4

EWC	Description	Waste In (tonnes)	Waste Out (tonnes)
200101	Paper and cardboard	23.24	
200102	Glass	22.12	
200108	Biodegradable kitchen and canteen waste	52.885	
200111	Textiles	14.16	
200136	WEEE – white goods	0.8	
200138	Wood other than that mentioned in 20 01 37	1415.39	1691.74
200139	Plastics	1.2	
200140	Metals	427.65	782.26
200201	Biodegradable waste	1521.88	1389.42
200301	Mixed municipal waste	11550.51	11661.54
200303	Street-cleaning residues	27.84	719.32
200307	Bulky waste	16916.48	12115.69
	Total received	42,588.5	
	Total consigned		41,746.7
	Recovery		36,090.29
	Disposal		5,656.38
	Recovery Rate (%)		86

Table 12 Waste Received & Consigned 2016

EWC	Description	Waste In (tonnes)	Waste Out (tonnes)
130503	Interceptor sludges		11.32
130507	Oily water from oil/water separators		12.76
150101	Paper and cardboard packaging	1,370.037	1,233.56
150102	Plastic packaging	19.275	5.76
150103	Wooden packaging	41.67	1.68
150104	Metallic packaging	2.14	
150106	Mixed packaging	732.72	2,634.4
150107	Glass Packaging	1.78	
150203	Absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02		
160504	Pressurised gas containers		0.76
170504	Soils and stones other than those mentioned in 17 05 03	35.22	
170904	Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	1,176.82	874.3
190801	Screenings	215.54	

EWC	Description	Waste In (tonnes)	Waste Out (tonnes)
190902	Sludge from water clarification	2,014.18	2,166.02
190905	Saturated or spent ion exchange resins	55.14	
191201	Mixed Packaging	4.64	
191207	Wood	0.3	
191209	Minerals (for example sand, stones)	137.14	
191210	Combustible waste RDF		66.56
191212	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	23.63	307.98
200101	Paper and cardboard	23.235	
200102	Glass	22.12	
200108	Biodegradable kitchen and canteen waste	5,293.62	4,979.22
200111	Textiles	32.582	
200138	Wood other than that mentioned in 20 01 37	3,160.79	3,373.49
200139	Plastics	15.74	
200140	Metals	497.029	618.49
200201	Biodegradable waste	1,555.89	1,311.22
200301	Mixed municipal waste	11,067.72	13,803.7
200303	Street-cleaning residues	218.84	1,009.18
200307	Bulky waste	14,213.17	9,520.62
	Total received	41,930.974	
	Total consigned		41,931.1
	Recovery		26,556.22
	Disposal		15,374.8
	Recovery Rate (%)		63.33

Table 13 Waste Received & Consigned 2004 - 2017

Description	Total Received (tonnes)	Total Consigned (tonnes)
2017	42,588.5	41,746.7
2016	41,930.97	41,931.1
2015	55,362.38	54,971.14
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

Section 6 Environmental Incidents and Complaints

6.1 Incidents

There were no reportable incidents during the year.

6.2 Register of Complaints

Greenstar maintains a register of complaints received in accordance with Condition 10.4 of the Licence. A copy of all complaints and responses are retained on site.

No complaints were received in 2017.

Section 7 Environmental Development

7.1 Environmental Management System

An Integrated Management System (IMS) has been implemented by Greenstar in accordance with the requirements of Occupational Health and Safety Assessment Series (OHSAS) 18001:2007 and International Standard Organisation (ISO) 14001:2015 in order to manage the health, safety and environmental performance of their business.

The IMS has been developed to incorporate continual improvement, while constantly ensuring that all requirements of the Licence conditions are taken into account. Greenstar has prepared and effectively implement documented procedures and instructions in accordance with the requirements of both OHSAS 18001:2007 and ISO 14001:2015.

A list of environmental, management, operating and maintenance procedures have been developed by Greenstar as part of the IMS. Details of these procedures are outlined in Appendix 2.

The status of objectives and targets which were previously identified for 2017 and the proposed objectives and targets for 2018 are presented in Table 14 and Table 15, respectively.

7.1.1 Site Management

The management and staffing structure is outlined below:

Name: Chris Todescu

Responsibility: Facility Manager

Experience: 15 years' experience in waste management. Has completed the FAS Waste Management course equivalent.

7.1.2 Staff Training

Three staff members received manual handling training in 2017. One staff members received first aid training and another received training in the operation of the 360 excavator.

7.2 Environmental Management Progression and Projected Programme

7.2.1 Progression of 2016 Objectives and Targets

The objectives and targets that were achieved during this reporting period are outlined in Table 14.

7.2.2 Projected 2017 Objectives and Targets

The projected targets and objectives for 2017 are presented in Table 15.

Table 14 Progression of 2017 Objectives and Targets

No.	Objective	Target	Responsibility	Progress/Update
1	Odour management	Ensure odour management plans are followed and potential new sources of odour are identified	Site management	On-going
2	Fire prevention	Implement recs from Fire Risk Assessments Update ERP & APP Maintain fire detection equipment	Site management/EHS team	On-going
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	Site management/EHS team	On-going
4	Waste acceptance, classification & records	EWC training for all weighbridge ops. Centralisation of all licences & permits inc NWCPs for hauliers.	EHS team	Completed
5	CRAMP, ELRA & Financial Provision	CRAMP, ELRA & Financial Provision to be reviewed	EHS team	Completed
6	Lighting in MRF buildings	Clean & upgrade where required all light fittings in MRF buildings	Site management	Completed
7	NWCP exemptions	Implement NWCP exemption declarations	Site management	Completed
8	Replace wind sock		Site management	Completed
9	Bund tests	Bund tests due	EHS team	Complete

Table 15 Objectives and Targets for 2018

No.	Objective	Target	Responsibility	Time scale
1	Nuisance management	Ensure odour/noise/dust management plans are followed and potential new sources are identified	Site management	Q1 - Q4
2	Fire prevention	Implement recs from Fire Risk Assessments Update ERP & APP where applicable Maintain fire detection equipment	Site management/EHS team	Q1 - Q4
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	Site management/EHS team	Q1 - Q4
4	ISO 14001 transition	Transition ISO 14001 to the 2015 standard	EHS team	Q2
5	Paperless project	Implement plans for a paperless office	All staff	Q3-Q4
6	Resource tracking	Sites to track energy usage and other resources in order to conserve wherever possible	Site management/EHS team	Q1 - Q4
7	Hardstand & site infrastructure	Review hardstand and formulate repair plan as required. Record using EF11.	Site management/EHS team	Q1 - Q4
8	Ongoing SW contamination investigation	Investigate roof water for potential source of contamination	EHS Team/site management	Q2-Q3
9	Licence review	Progress Licence review application to incorporate yard to the rear of existing site	EHS Team	Q1-Q4

7.3 Communications Programme

A commitment has been made by SEHL to make its Environmental, Health & Safety Policy and other relevant records available to the public and interested parties. To facilitate this, a Communications Programme has been established by SEHL.

The following records are available for public inspection on site:

- Environmental, Health & Safety Policy
- IED Licence
- Licence Application and Review documentation
- Monitoring records
- Complaints File
- EPA Correspondence File

7.4 Nuisance Controls

The presence of vermin is controlled at the site by Rentokil who are contracted by Greenstar to regularly assess vermin activity and inspect all bait traps located throughout the facility. Records from Rentokil are maintained on site.

Bird control measures are implemented at the facility. Work is carried out with the assistance of Bird Control Ireland who manage bird control at Baldoyle airfield. A speaker system is in operation at the facility. The bird control measures which were implemented and adjusted in 2015 have proved effective in limiting the number of birds at the site.

An odour suppression system was installed onsite by SEHL in 2011. Further adjustments to the odour control system (rotary atomisers) were completed by PCP Group in 2015.

7.5 Waste Recovery

The facility is designed to increase the recycling of biodegradable materials and reduce the volume of waste disposed to landfill. Of the 41,746.67 tonnes of waste consigned from the facility approximately 86% was sent for recovery.

7.6 DMP, ELRA & Financial Provision

A Decommissioning Management Plan (DMP) and an Environmental Liabilities Risk Assessment (ELRA) which included a Financial Provision (FP) were approved by the Agency in 2014 and provision is currently in place with the agreement of the Agency. A further review of the decommissioning plan and the ELRA was completed in 2017.

7.7 Volume of Wastewater Produced and Transported Off-Site

Wastewater generated from vehicle washing at the facility and the floor of the MRF building is directed to a silt trap and then to a petrol/oil interceptor before entering the municipal sewer system.

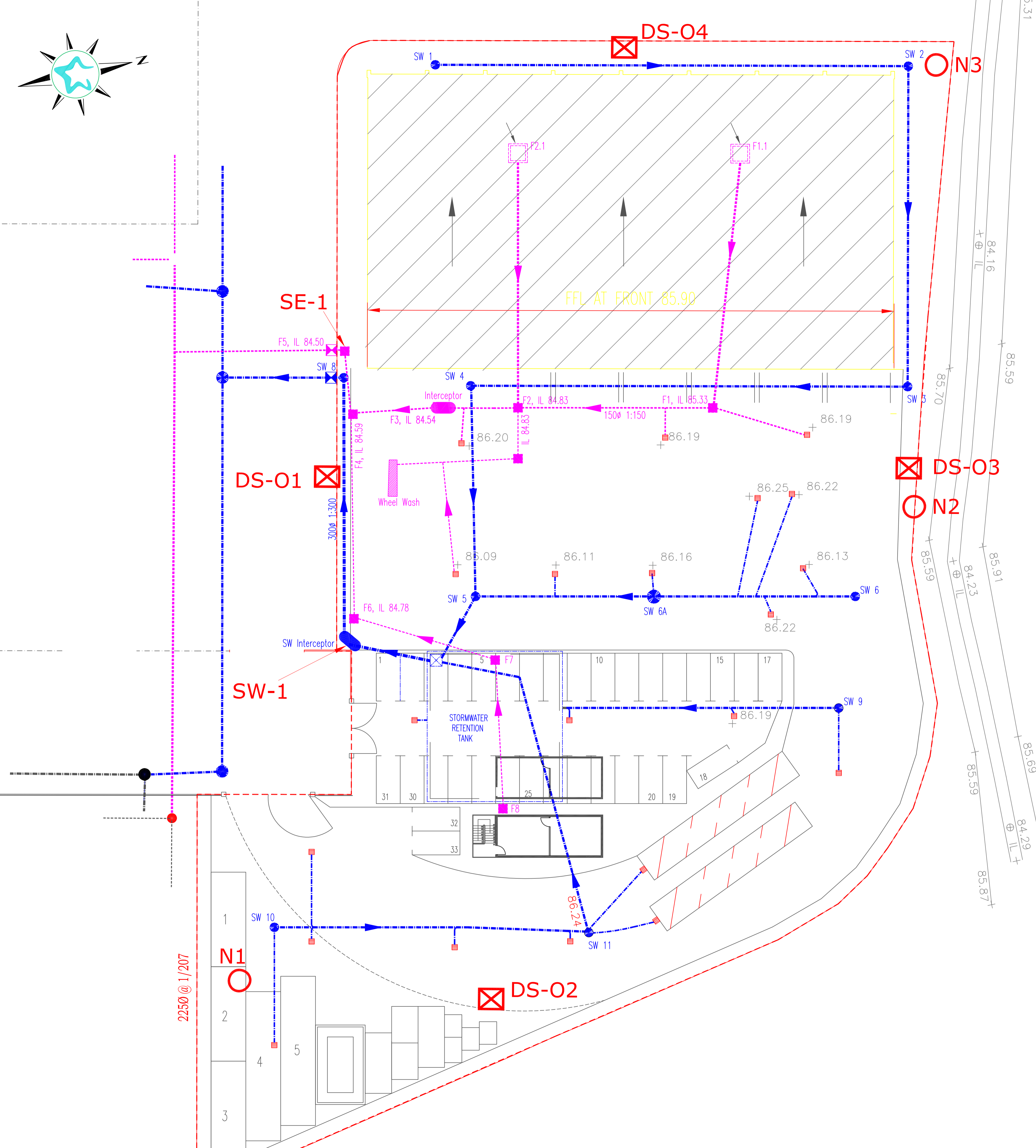
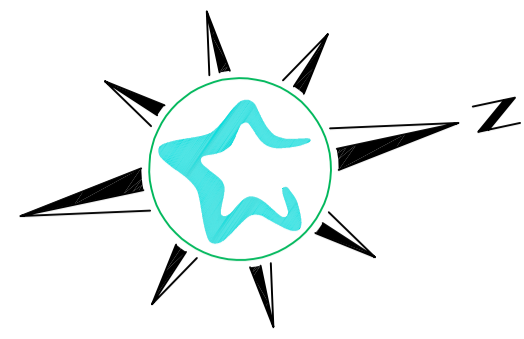
Approximately 4.34 m³ of wastewater and sludge was removed from the drainage interceptors and transported off-site during the 2017 reporting period.

Section 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 3.

Appendix 1: Sampling Locations



	MANHOLE	DENOTES FOUL SEWER
		DENOTES STORM WATER SEWER
	DS-XX	DENOTES DUST WATER MONITORING POINT
	NX	DENOTES NOISE MONITORING POINT
	SE-1	DENOTES SEWER MONITORING POINT
	SW-1	DENOTES SURFACE WATER MONITORING POINT
		DENOTES SHUT OFF VALVE

NSL1 IS LOCATED OFF SITE AT GRID CO-ORDINATES;
E301433, N229185

Client			
Project GREENOGUE DRAINAGE AS-BUILT			
Location GREENOGUE INDUSTRIAL ESTATE, RATHCOOLE, CO. DUBLIN			
Title FACILITY DRAINAGE AND MONITORING POINTS			
Project No.	Checked by SS	Drawing No. FIG 001	
File No.	Reviewed by		
Created by I McC			
FOR INFORMATION PURPOSES		09/03/15	A
FOR INFORMATION PURPOSES		06/12/16	B
Description		Date	Version
Scale 1:400 A4	Date	December 2016	

Appendix 2: Integrated Management System



Doc. No.: Control	Revision No.: As Shown	Issue Date: As Shown
Approved By:	David Naughton – Group Environmental Manager	Page 1 of 5
	Joe Nicholson – Group H&S Manager	

Integrated Procedures - IP

IP-01	Document & Record Control Procedure	Rev 01, 22/05/17
IP-02	Health & Safety Risk Assessment Procedure	Rev 01, 22/05/17
IP-03	Environmental Aspects & Impacts Procedure	Rev 01, 22/05/17
IP-04	Legal & Regulatory Requirements Procedure	Rev 01, 22/05/17
IP-05	Objectives, Targets & Management Programmes Procedure	Rev 01, 22/05/17
IP-06	Competence, Training & Awareness Procedure	Rev 01, 22/05/17
IP-07	Communication & Consultation Procedure	Rev 01, 22/05/17
IP-08	Monitoring, Measurement & Improvement Procedure	Rev 01, 22/05/17
IP-09	Evaluation of Compliance Procedure	Rev 01, 22/05/17
IP-10	Non Conformances, Corrective/Preventive Actions Procedure	Rev 01, 22/05/17
IP-11	Internal Audit Procedure	Rev 01, 22/05/17
IP-12	Management Review Procedure	Rev 01, 22/05/17
IP-13	Control of Contractors/Visitors Procedure	Rev 01, 22/05/17
IP-14	Health & Safety & Environmental Monitoring	Rev 01, 22/05/17
IP-15	Emergency Preparedness & Response Procedure	Rev 01, 22/05/17
IP-16	Fire Prevention Procedure	Rev 01, 22/05/17
IP-17	Bin Washing Procedure	Rev 01, 22/05/17
IP-18	Accident Prevention Procedure	Rev 01, 22/05/17
IP-19	Fuel Procedure for Tanks & Mobile Plant	Rev 01, 22/05/17

Safety Procedures - SP

SP-01	Permit to Work Procedure	Rev 01, 22/05/17
SP-02	Maintenance & Calibration Procedure	Rev 01, 22/05/17
SP-03	Mobile Plant Procedure	Rev 01, 22/05/17
SP-04	Fork Truck Procedure	Rev 01, 22/05/17
SP-05	Operation of Fixed Plant Procedure	Rev 01, 22/05/17
SP-06	Lock Out / Tag Out Procedure	Rev 01, 22/05/17
SP-07	Health & Safety Notification Procedure	Rev 01, 22/05/17
SP-08	MSW Shredder routine Maintenance & Clearing of Blockages Procedure (SCGT)	Rev 01, 22/05/17
SP-09	Weighbridge & Tipping Procedure (SCGT)	Rev 01, 22/05/17
SP-10	Cleaning of Washing Bay (Greenogue)	Rev 01, 22/05/17



Doc. No.: Control	Revision No.: As Shown	Issue Date: As Shown
Approved By:	David Naughton – Group Environmental Manager	Page 2 of 5
	Joe Nicholson – Group H&S Manager	

Environmental Procedures - EP		
EP-01	Office Waste & Energy Management Procedure	Rev 01, 22/05/17
EP-02	Decommissioning and Aftercare Procedure	Rev 01, 22/05/17
EP-03	Environment Communications Procedure	Rev 01, 22/05/17
EP-04	Waste Permits & Licences Procedure	Rev 01, 22/05/17
EP-05	Waste Acceptance Procedure	Rev 01, 22/05/17
EP-06	Unacceptable Waste Procedure	Rev 01, 22/05/17
EP-07	Waste & Material Storage Procedure	Rev 01, 22/05/17
EP-08	Waste Processing Procedure	Rev 01, 22/05/17
EP-09	Site Infrastructure Procedure	Rev 01, 22/05/17
EP-10	Nuisance Management Procedure (Site Specific)	(Site Specific) Rev 01, 22/05/17
EP-11	Civic Amenity Site Procedure	Rev 01, 22/05/17

Doc. No.: Control	Revision No.: As Shown	Issue Date: As Shown
Approved By:	Malcolm Dowling – Group Compliance Manager	Page 3 of 5

Amendment History

Date	Amendment No.	Procedure No:	Revision No:	Comment	Authorised By
05.07.10	01	All	01	Initial Issue	M.D & O.C
13.09.10	02	EP-03	02	Issue of Incident Reports	M.D
20.09.10	03	IP-10	02	Env issues not logged on WIMS Database	M.D
29.10.10	04	IP-13	02	Use of M&M equipment by contractors	M.D & O.C
29.10.10	05	IP-14	02	Use of M&M equipment by contractors	M.D & O.C
29.10.10	06	SP-02	02	Inclusion of Maintenance Schedule	M.D & O.C
05.11.10	07	IP-04	02	Inclusion of other requirements	S.B & O.C
01.02.11	08	SP-08	01	Inclusion of new procedure	O.C
01.02.11	09	IP-10	03	Inclusion of SP-08	O.C
01.02.11	10	IP-15	02	Removal of SF-022	O.C
01.02.11	11	Contents	As shown	EP-10 Site Specific	M.D & O.C
01.02.11	12	IP-06	02	Addressing Agency Staff needs	M.D & O.C
01.02.11	13	Circ List	02	Amendment to document control	M.D & O.C
04.04.11	14	SP-02	03	Inclusion of Site Specific Maintenance schedules	O.C
07.06.11	15	IP-11	02	Inclusion of H&S & Env Internal Audit Schedules	M.D & O.C
14/09/11	16	EP-02	02	Inclusion of decommissioning of plant/equipment	S.B
15/09/11	17	IP-09	02	Inclusion of Statutory Inspections	O.C
01/12/11	18	SP-09	01	Inclusion of new procedure for SCGT	O.C
01/12/11	19	SP-10	01	Inclusion of new procedure for SCGT	O.C
03/05/12	20	SP-01	02	Amendment to remove SF 028	O.C
05/05/12	21	SP-11	01	Inclusion of a new procedure for Greenogue	O.C
28/05/12	22	IP-11	03	General Amendments to internal audit procedure	M.D & O.C
08/06/12	23	IP-13	03	Grammatical amendment	M.D & O.C
15/04/13	24	IP-06	03	Agency staff – sign-off record sufficient proof of training. TMS optional	M.D & O.C

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	O.C
06/05/15	32	EP-09	02	Ref to new form EF-11 added	SS
21/01/16	33	IP-05/IP-07/IP-12	02	Meeting frequency refs updated	SS
14/11/16	34	IP-18	02	Amended as per EPA instruction	SS
11/01/17	35	IP-19	01	New addition	SS
22/05/17	36	All EP's, SP's & IP's	01	Review of all procedures	DN & JN



Doc. No.: Control	Revision No.: As Shown	Issue Date: As Shown
Approved By:	Malcolm Dowling – <i>Group Compliance Manager</i>	Page 5 of 5

Circulation List

The Integrated Procedures Manual is a controlled document. Copies of the Procedures Manual are available as follows;

Copy Number	Holder
1 (Master Copy)	Group EHS Managers
2	Greenstar EnviroManager
3	Greenstar Intranet – Electronic Copy

Appendix 3: European Pollutant Release and Transfer Register



Environmental Protection Agency

| PRTR# : W0188 | Facility Name : Starrus Eco Holdings Limited (Greenogue) |
 Filename : W0188_2017.xls | Return Year : 2017 |

[Guidance to completing the PRTR workbook](#)

PRTR Returns Workbook

Version 1.1.19

REFERENCE YEAR	2017
-----------------------	------

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	Sara Smyth
AER Returns Contact Email Address	sara.smyth@greenstar.ie
AER Returns Contact Position	Environmental Manager
AER Returns Contact Telephone Number	086-8569414
AER Returns Contact Mobile Phone Number	086-8569414
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	Significant decrease in the BOD and Sulphate output to waste water due to lower levels recorded as a result of grab sampling.
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](#)

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

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

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

SECTION B : REMAINING PRTR POLLUTANTS

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

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

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

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

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

Additional Data Requested from Landfill operators

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

Landfill:

Starrus Eco Holdings Limited (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_2017.xls | Return Year : 2017 |

29/03/2018 14:48

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 c

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

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

SECTION B : REMAINING PRTR POLLUTANTS

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

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

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

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

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

4.3 RELEASES TO WASTEWATER OR SEWER

[Link to previous years emissions data](#)

| PRTR# : W0188 | Facility Name : Starrus Eco Holdings Limited (Greenogue) | Filename : W0188_20

29/03/2018 14:48

SECTION A : PRTR POLLUTANTS

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

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

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

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
Pollutant No.	Name	M/C/E	Method Used		Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
			Method Code	Designation or Description				
238	Ammonia (as N)	M	PER	Based on estimate of water used in wheel wash. Analysis is ISO accredited.	79.76	79.76	0.0	0.0
303	BOD	M	PER	Based on estimate of water used in wheel wash. Analysis is ISO accredited.	337.5	337.5	0.0	0.0
306	COD	M	PER	Based on estimate of water used in wheel wash. Analysis is ISO accredited.	1732.0	1732.0	0.0	0.0
308	Detergents (as MBAS)	M	PER	Based on estimate of water used in wheel wash. Analysis is ISO accredited.	2.1525	2.1525	0.0	0.0
314	Fats, Oils and Greases	M	PER	Based on estimate of water used in wheel wash. Analysis is ISO accredited.	98.8	98.8	0.0	0.0
343	Sulphate	M	PER	Based on estimate of water used in wheel wash. Analysis is ISO accredited.	145.9	145.9	0.0	0.0
240	Suspended Solids	M	PER	Based on estimate of water used in wheel wash. Analysis is ISO accredited.	1043.48	1043.48	0.0	0.0

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

| PRTR# : W0188 | Facility Name : Starrus Eco Holdings Limited (Greenogue) | Filename : W0188_2017.xls | Return Year : 2017 |

29/03/2018 14:48

Please enter all quantities on this sheet in Tonnes

0

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Licence/Permit No of Next Destination Facility Name and Licence/Permit No of Recoverer/Disposer	Haz Waste : Name and Address of Final Destination Facility Non Haz Waste: Address of Recoverer/Disposer	Name and License / Permit No. and Address of Final Recoverer / Dispose (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	13 05 03	Yes	4.34	interceptor sludges	R13	M	Weighed	Offsite in Ireland	Enva,W0184-02	Enva Ireland Limited (Portlaoise) ,Clonminam Industrial Estate ,Portlaoise ,County Laois.,Ireland Ballymount Road Walkinstown Dublin 12	Enva,W0184-02	Enva Ireland Limited (Portlaoise) ,Clonminam Industrial Estate ,Portlaoise ,County Laois.,Ireland
Within the Country	15 01 03	No	4.52	wooden packaging	R13	M	Weighed	Offsite in Ireland	IPR,W0263-01	Max Pallet Services Ltd,Max Pallet Services Ltd		
Within the Country	15 01 03	No	24.18	wooden packaging	R13	M	Weighed	Offsite in Ireland	Starus Eco Holdings Ltd,W0053-03	Bray Depot,Fassaroe,Bray,Co Wicklow,Ireland Ballymount Cross,Tallaght,Dublin 24,-,Ireland		
Within the Country	15 01 06	No	108.1	mixed packaging	R13	M	Weighed	Offsite in Ireland	Panda,W039-02	Walkinstown Dublin 12 Dublin,-,-,-,Ireland		
Within the Country	15 01 06	No	6.98	mixed packaging	R13	M	Weighed	Offsite in Ireland	IPR,W0263-01	Long Mile Rd ,Drinnagh ,Dublin,-,Ireland		Long Mile Rd ,Drinnagh ,Dublin,-,Ireland
Within the Country	16 05 04	Yes	1.98	halons containing dangerous substances	R4	M	Weighed	Offsite in Ireland	color gas,-	83 Belfast Road,Nutts Corner,Crumlin,Antrim,united kingdom	color gas,-	
To Other Countries	17 02 01	No	38.38	wood	R13	M	Weighed	Abroad	McKinstry,LN/13/45	Blackhall Soil Recovery Facility ,Blackhall		
Within the Country	17 05 04	No	1674.18	soil and stones other than those mentioned in 17 05 03	R10	M	Weighed	Offsite in Ireland	Behans Land Restoration Limited,W0247-01	,Punchestown Naas County Kildare,-,Ireland		
Within the Country	17 09 04	No	41.76	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	R13	M	Weighed	Offsite in Ireland	Starus Eco Holdings Ltd,W0053-03	Bray Depot,Fassaroe,Bray,Co Wicklow,Ireland		
Within the Country	17 09 04	No	5600.681	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	R13	M	Weighed	Offsite in Ireland	Panda,W0140-02	Nurendale (Rathdrinagh) ,Rathdrinagh ,Beauparc ,Navan County Meath ,Ireland		
Within the Country	19 08 01	No	47.18	screenings	D5	M	Weighed	Offsite in Ireland	Ballynagran Landfill Ltd,W0165-02	Ballynagran,Coolbeg & Kicandra,Co. Wicklow,-,Ireland		
Within the Country	19 08 01	No	30.7	screenings	D5	M	Weighed	Offsite in Ireland	Knockharley Landfill Ltd,W0146-01	Knockharley Landfill ,Kentstown ,Co Meath ,Ireland		
Within the Country	19 09 02	No	2788.56	sludges from water clarification other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R3	M	Weighed	Offsite in Ireland	Enva,W0184-02	Enva Ireland Limited (Portlaoise) ,Clonminam Industrial Estate ,Portlaoise ,County Laois.,Ireland		
Within the Country	19 12 12	No	49.56	11 other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R13	M	Weighed	Offsite in Ireland	Starus Eco Holdings Ltd,W0053-03	Bray Depot,Fassaroe,Bray,Co Wicklow,Ireland		
Within the Country	19 12 12	No	2947.84	11 other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R13	M	Weighed	Offsite in Ireland	Panda,W0140-02	Nurendale (Rathdrinagh) ,Rathdrinagh ,Beauparc ,Navan County Meath ,Ireland		
Within the Country	20 01 38	No	1081.54	wood other than that mentioned in 20 01 37	R13	M	Weighed	Offsite in Ireland	Starus Eco Holdings Ltd,W0053-03	Bray Depot,Fassaroe,Bray,Co Wicklow,Ireland		
Within the Country	20 01 38	No	610.2	wood other than that mentioned in 20 01 37	R13	M	Weighed	Offsite in Ireland	Clonmel Waste Disposal Ltd ,WP-008-02	Lawlesstown , Clonmel ,Co. Tipperary ,Ireland		
Within the Country	20 01 40	No	772.4	metals	R4	M	Weighed	Offsite in Ireland	Davis Recycling Ltd.,W0134-01	10 The Anchorage Business Park,Charlotte Quay,Dublin 4,,Ireland		

Within the Country	20 01 40	No	9.86 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	867.88 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	521.54 biodegradable waste	R3	M	Weighed	Offsite in Ireland	Enrich Environmental,WMP 2004/57	Kilcock Co. Kildare,.....,Ireland

Within the Country	20 03 01	No	5.88 mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Starus Eco Holdings Ltd,W0053-03	Bray Depot,Fassaroe,Bray,Co Wicklow,Ireland
Within the Country	20 03 01	No	37.46 mixed municipal waste	R13	M	Weighed	Offsite in Ireland	South Dublin County Council,W0003-03	Ballymount Baling Station ,Ballymount Road ,Walkinstown ,Dublin 12.,Ireland
Within the Country	20 03 01	No	6.54 mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Starus Eco Holdings Limited,W0136-03	Starus Eco Holdings Limited , Sarsfieldcourt Industrial Estate , Sarsfieldcourt
Within the Country	20 03 01	No	40.18 mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Starus Eco Holdings Ltd,WFP-CK-10-0047-03	Glanmire ,Cork.,,ireland Sarsfield Court Ind. Est. ,Glanmire ,Cork.,,ireland
Within the Country	20 03 01	No	1293.4 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	3546.42 mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Ballynagran Landfill Ltd,W0165-02	Ballynagran,Coolbeg & Kilcandra,Co. Wicklow.,,Ireland
Within the Country	20 03 01	No	6480.24 mixed municipal waste	R1	M	Weighed	Offsite in Ireland	Dublin Waste to Energy Limited ,W0232-01	Poolbeg ,Pigeon House Road ,Poolbeg Peninsula ,Dublin 4.,,Ireland
Within the Country	20 03 01	No	179.74 mixed municipal waste	R13	M	Weighed	Offsite in Ireland	IPR,W0263-01	Ballymount Road Walkinstown Dublin 12 Dublin.,,-,.,,Ireland
Within the Country	20 03 01	No	52.32 mixed municipal waste	R1	M	Weighed	Offsite in Ireland	Indaver IWMF ,W0167-02	Carranstown ,Duleek,Co Meath,-,ireland
Within the Country	20 03 01	No	19.36 mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Knockharley Landfill Ltd,W0146-01	Knockharley Landfill ,Kentstown ,Co Meath ,,,ireland
Within the Country	20 03 03	No	87.64 street-cleaning residues	D5	M	Weighed	Offsite in Ireland	Bord Na Mona PLC,W0201-03	Drehid Landfill,Drehid ,Co. Kildare.,,Ireland
Within the Country	20 03 03	No	495.24 street-cleaning residues	D5	M	Weighed	Offsite in Ireland	Ballynagran Landfill Ltd,W0165-02	Ballynagran,Coolbeg & Kilcandra,Co. Wicklow.,,Ireland
Within the Country	20 03 03	No	136.44 street-cleaning residues	D5	M	Weighed	Offsite in Ireland	Knockharley Landfill Ltd,W0146-01	Knockharley Landfill ,Kentstown ,Co Meath ,,,ireland
Within the Country	20 03 07	No	12049.65 bulky waste	R13	M	Weighed	Offsite in Ireland	Starus Eco Holdings Ltd,W0053-03	Bray Depot,Fassaroe,Bray,Co Wicklow,Ireland
Within the Country	20 03 07	No	29.54 bulky waste	R13	M	Weighed	Offsite in Ireland	Starus Eco Holdings Ltd,W0183-01	Millennium Park,Ballycoolin, Dublin 11.,,Ireland
Within the Country	20 03 07	No	24.6 bulky waste	R13	M	Weighed	Offsite in Ireland	Nurendale Limited,W0261-02	Cappagh Road ,Cappogue , Finglas ,Dublin 11 ,Ireland
Within the Country	20 03 07	No	11.9 bulky waste	R13	M	Weighed	Offsite in Ireland	Panda,W0140-02	Nurendale (Rathdinagh) , Rathdrinagh ,Beauparc ,Navan County Meath.,Ireland



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