

Starrus Eco Holdings Ltd.

**Annual Environmental
Report (AER) 2018
Millennium MRF,
Ballycoolin, Dublin 11
Licence: W0183-01**

April 2019

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Section 1 Introduction

1.1 Reporting Period

This report is the 2018 Annual Environmental Report (AER) for the Starrus Eco Holdings Ltd (SEHL), Material Recovery Facility (MRF) at Millennium Business Park, Ballycoolin, Dublin 11. The report covers the period from 1 January 2018 to 31 December 2018.

1.2 IED Licence

The Environmental Protection Agency (EPA) transferred Licence No. W0183-01 to Starrus Eco Holdings Limited for its facility at Millennium Business Park, Grange, Ballycoolin, Co. Dublin on March 2014.

On 16 December 2015, the Licence 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.

This report is prepared in accordance of condition 10.9 of the Licence, which requires and Annual Environmental Report (AER) for the facility to be submitted to the EPA.

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Section 2 Site Description

2.1 Site Location

SEHL operate a MRF at the Millennium Business Park, Ballycoolin, Dublin 11. The facility is situated in West Dublin, approximately 5km north-west of Finglas. The surrounding area is characterised mainly by industrial and commercial land use.

2.2 Licenced Waste Activities

The facility is in operation since July 2006. It is currently licensed to accept and process 220,000 tonnes of waste. All waste processing takes place inside the waste transfer building, as specified in Condition 4.1 of the Licence. The EPA has granted approval for the outdoor storage of wrapped bales of Solid Recovered Fuel (SRF).

2.2.1 Waste Types

The licensed waste types and quantities under Schedule A of the Licence are shown in Table 1:

Table 1 Waste Acceptance Categories & Quantities at Millennium Park

Waste Type	Maximum (tonnes per annum) Phase I	Maximum (tonnes per annum) Phase II
Municipal	65,000	100,000
Commercial & Industrial	70,000	90,000
Construction & Demolition Waste	24,000	30,000
Total	159,000	220,000

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:

Commercial & Industrial (C&I) Waste

Commercial and Industrial waste is delivered to the facility by skip vehicles. This waste is off loaded in dedicated bays inside the MRF building. Upon tipping, the waste is inspected for contamination and unsuitable materials; these are removed immediately into a quarantine area.

The C&I waste is initially sorted using a mechanical grab to remove large items such as timber, metal and oversized light materials, which are removed to other storage areas in the building. The recovered materials are sent to offsite facilities via articulated vehicles for recycling or recovery.

Construction & Demolition Waste (C&D)

C&D waste is tipped inside the MRF building in specific bays. Upon tipping, the waste is inspected for contamination and unsuitable materials; these are removed immediately into a quarantine area.

The C&D waste is initially sorted using a mechanical grab to remove large items such as timber, metal and large oversized rubble, which are removed to other storage areas in the building. The

recovered materials are sent to offsite facilities for recycling or recovery via articulated tipper vehicles.

Mixed Solid Waste (MSW)

Mixed solid waste (MSW) is delivered to the facility by refuse collection vehicles. The MSW is tipped in dedicated bays inside the MRF building. The waste, upon tipping, is inspected for contamination and unsuitable materials. If any are found they are removed to the quarantine area.

Any large items or unsuitable materials are removed using the mechanical grab. The recovered materials are sent to offsite facilities via articulated vehicles for recovery.

In August 2014 an SEW was submitted and approved by the EPA. This allowed for the removal of the C&I and C&D processing lines and replacement of the two processing lines with specialist baling and shredding equipment for dry recyclables. These have recently been removed and at present the site operates solely as a transfer station.

In early 2018, a Flexus Baler was added inside the MRF in Millennium Park. This is used for baling SRF during the cement factories downtimes.

2.2.3 Plant and Machinery List

A list of the plant and machinery in use at the facility is shown 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 (tonnes per day)
2	Grab Handlers	Liebherr	400
1	Loading Shovel	Volvo	8640
2	Excavator	Kobelco	500
1	Mitsubishi Forktruck	Forktruck	

Section 3 Emissions Monitoring

3.1 Overview

The monitoring required for the facility includes surface water, wastewater, dust and noise. All environmental emissions monitoring is carried out at the intervals and frequency specified in schedule D of the Licence, while reports presenting the results of this monitoring are also submitted to the EPA at various frequencies, in accordance with Schedule E of the Licence as shown in 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 001 in Appendix 1. An overview of the results of monitoring carried out at the facility in 2018 are contained below.

3.2 Surface Water Monitoring

Following agreement with the EPA, surface water sampling was not carried out at the facility in 2018. This was due to ongoing issues with the Millennium Business Park storm water system, which was resulting in back flowing of storm water into the SEHL system. The surface water is currently diverted to the foul water system; it flows to a silt trap and oil interceptor before entering the municipal sewer system.

3.3 Waste Water Monitoring

The waste water discharge comprises vehicle washings, and drainage from the materials recovery shed and yard area where waste processing and handling take place. It flows to a silt trap and oil interceptor before entering the municipal sewer system.

3.3.1 Monitoring Locations

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

3.3.2 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.

3.3.3 Monitoring Results

The results for 2018 are presented in Table 4. ELVs set out in the Licence are also included in Table 4. Sampling due to take place in February was not possible due to snow and was postponed until March. Due to an extended period of drought, it was not possible to collect a sample in June/July 2018.

Table 4 SE-1 Wastewater Monitoring Results 2018

Parameter	Units	Mar-18	April-18	Aug-17	Oct-18	Nov-18	Emission Limit Value
pH	pH units	7.0	7.6	7.4	8.09	8.0	6 -10
Conductivity	µS/cm	789	895	*	528	714	-
BOD	mg/l	16	22	53	20	10	6,000
COD	°C	102	99	27	156	76.0	12,000
Total Suspended Solids	mg/l	84	151	107	37	37.0	2,500
Fats, Oils and Greases	mg/l	14.3	8.92	12	5.18	5.18	100
Temperature	°C	7.5	8.9	*	8.9	11.5	42
Sulphates	mg/l	299	74.1	241	75.7	75.7	1,000
Ammoniacal Nitrogen	mg/l	<0.6	0.76	<0.06	<0.06	<0.06	100
Detergents	mg/l	<0.21	<0.21	<0.02	<0.21	<0.21	100
Phosphates as P	mg/l	1.2	<0.6	<0.6	<0.6	<0.6	100

3.3.4 Interpretation of Results

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

3.4 Noise Monitoring

Annual noise monitoring was undertaken by Damian Brosnan Acoustics on 27 through 29 September 2018. 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.”*

Day time and night-time monitoring was carried out as the site is operational during night-time hours.

3.4.1 Monitoring Locations

Noise monitoring was undertaken at the four locations presented on Drawing 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.

3.4.2 Monitoring Results

Results of the noise monitoring carried out are summarised in Table 5.

Table 5 Noise Monitoring Results 2018

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	29/09/2018 10:57-11:27	57	60	44	<57
N2	28/09/2018 12:22 – 12:52	61	64	52	61
N3	28/09/2018 11:36 – 12:06	71	74	66	<68
NSL1	28/09/2018 13:01 – 13:31	69	74	54	<52
		Night-time			
N1	27-28/09/2018 23:46-00:16	46	43	38	<40
N2	28/09/2018 00:41-01:11	52	54	45	52
N3	28/09/2018 00:34-01:04	51	51	44	48
NSL1	27/09/2018 23:00-23:30	58	56	42	<42

3.4.3 Results Interpretation

Site specific LAeq 30 min levels recorded at the three boundary stations were less than 68 dB during daytime and 52 dB or less during night-time. The SEHL Millennium Business Park operations are the dominant noise source at two of these locations. It is understood that noise limits specified in waste licence W0183-01 do not apply to these stations.

At the offsite noise sensitive station NSL1, the only station to which the licence noise limits apply, the LAeq 30 min level measured was 69 dB during the day and 58 dB at night. This noise was from extraneous sources (local traffic, aircraft, birds and reverse alarms from nearby premises during the day, and local traffic and aircraft at night). SEHL Millennium Business Park emissions were not audible and were therefore lower than the 55 dB daytime limit and 45 dB night-time limit specified in licence W0183-01. SEHL operations did not give rise to tones or impulses at NSL1, thus complying with condition 5.5 of the Licence.

3.5 Dust Monitoring

Dust monitoring was carried out on three occasions in 2018. The Licence requires a minimum of three yearly monitoring events to take place. The three monitoring events took place in July, August and September 2018. The measurements recorded were 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.

3.5.1 Monitoring Locations

The dust monitoring was carried out at four on-site locations (DS-01, DS-02, DS-03 and DS-04) in 2018. The locations of these monitoring points are shown on Drawing 001.

3.5.2 Monitoring Results

The results for organic, inorganic and total dust deposition for the three monitoring events which took place in July, August and September are shown in Table 6, Table 7, and Table 1 respectively. The dust emission limit set out in the Licence is also included in these tables.

Table 6 Dust Monitoring Results July 2018

Sampling Point	Total Dust	Organic Dust	Inorganic Dust
	July 2018		
	mg/m ² /day		
DS-01	6.90	1.51	5.39
DS-02	83.03	39.55	43.48
DS-03	67.32	29.34	37.98
DS-04	39.72	26.31	13.41
Limit	350		

* dust jars contaminated with bird excrement

Table 7 Dust Monitoring Results August 2018

Sampling Point	Total Dust	Organic Dust	Inorganic Dust
	August 2018		
	mg/m ² /day		
DS-01	15.20	6.06	9.14
DS-02	59.08	35.62	23.45
DS-03	54.92	34.33	20.59
DS-04	37.03	24.68	12.34
Limit	350		

Table 8 Dust Monitoring Results September 2018

Sampling Point	Total Dust	Organic Dust	Inorganic Dust
	September 2018		
	mg/m ² /day		
DS-01	20.42	8.30	12.12
DS-02	18.63	15.43	3.20
DS-03	18.91	13.35	5.55
DS-04	19.47	11.16	8.30

Limit	350
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3.5.3 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 2018 reporting year.

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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 2018 reporting period.

4.2 Summary of Resource & Energy Consumption

Resources consumed at Millennium Business Park MRF include diesel fuel, electricity, oil (hydraulic, transmission, engine), truck wash detergent, water (mains supply), natural gas and anti-freeze. Table 9 provides estimates of the resources used on-site during 2018 as well as 2017.

Table 9 Estimates of Resources used on site – 2017 & 2018

Resource	Quantities used 2017	Quantities used 2018
Diesel (litres)	46,213	217,688
Electricity (kWh)	652,562	579,162
Oils (hydraulic, transmission, engine) (litres)	1,300	1,300
Detergent (truck wash) (litres)	30	30
Water (mains)(litres)	11,913,000	18,590,000
Natural Gas (kWh)	31,843	35,072
Anti-Freeze (litres)	75	75

4.3 Tank & Pipeline Integrity Testing

Condition 3.13.3 of the Licence requires that tank, drum, pipeline and bund testing be carried out every three years on site.

Bund testing was undertaken in 2017 and pipeline testing took place in 2016. The testing indicated that all bunds and pipes tested are fit for purpose.

Section 5 Waste

5.1 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 consigned in 2018 is presented in the waste management record submission included as Appendix 3.

Table 10 shows the quantities of wastes accepted and consigned for the reporting period. The total quantity of waste accepted was 227,060.60 tonnes and the total amount consigned was - 223,431.11 tonnes. The records show that 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 2018 which will be consigned in 2019.

For comparative purposes, the quantity of waste received and consigned in 2017 is presented in Table 11 and quantity of waste received and consigned from 2004 to 2018 is presented in Table 12.

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 Licences is retained on site for EPA inspection.

Table 10 Waste Received & Consigned 2018

EWC	Description	Waste In (tonnes)	Waste Out (tonnes)
100305	Waste Alumina	5.20	
101008	Gypsum materials	7.94	
150101	Cardboard Packaging	34.095	
150102	Plastic Packaging	302.699	376.58
150103	Wooden Packaging	209.886	3.4
150104	Aluminium	46.14	1.34
150105	Compost Packaging	16.21	
150106	Mixed Packaging	39.17	
150107	Glass Packaging	12.99	
150109	Textile	8.9	
160103	Tyres	1.62	47.22
160504	HAZ Gases Cylinders		3.1
160601	HAZ Battery Lead Acid		3.734
170101	Concrete, Bricks, Tiles & Ceramics	48.16	13.88
170107	C&D	113.08	120.9
170203	Plastic	3.24	
170302	Bituminous Material	17.58	15.08
170401	Copper	0.26	

EWC	Description	Waste In (tonnes)	Waste Out (tonnes)
170405	Steel	482.21	11.7
170504	Soil and Stone	834.998	706.08
170802	Gypsum materials	492.56	16.36
170904	C&D Inert Mixed	26705.95	43388.95
190203	Back End Floc	2866.2	
190801	Screenings	9.98	
190902	Interceptor Sludge		9.74
190905	Resin	4.68	
191001	Metal	46.55	197.98
191204	Plastic	10.36	107
191207	Wood	37.1	8670.72
191209	C&D Inert Mixed	648.241	178.3
191210	Solid Recovered Fuel (SRF)	29044.09	29177.91
191212	C&I Dry Mixed	873.387	49111.68
200101	Cardboard & Paper	48.87	
200102	Glass	191.825	
200108	Biodegradable Kitchen & Canteen Waste	27611	24888.17
200135	REC Electronics & Electrics	0.3	
200136	White Goods - WEE	0.42	
200138	Wood	7421.22	1943.32
200139	Plastic	11.84	
200140	Metal	1000.153	4136.04
200201	Green Biodegradable Waste	2004.601	1755.32
200301	MSW Municipal Mixed	60219.11	56808.64
200302	International Catering Waste	2.61	
200303	Street Cleaning	581.58	374.08
200307	Bulky Waste	65054.92	1363.88
	Total received	227,071.93	
	Total consigned		223,431.11
	Recovery		216,616.92
	Disposal		6,814.19
	Recovery Rate (%)		96.95%

Table 11 Waste Received & Consigned 2017

EWC	Description	Waste In (tonnes)	Waste Out (tonnes)
020106	Equitation Waste	15.34	
100305	Waste Alumina	6.10	
130208	Waste oil		0.8
130503	Interceptor Sludge		8.7
150101	Cardboard Packaging	75.13	
150102	Plastic Packaging	180.66	268.44
150103	Wooden Packaging	153.27	39.98
150104	Aluminium	30.25	
150105	Compost Packaging	13.02	
150106	Mixed Packaging	17.69	69.04
150107	Glass Packaging	7.98	
150109	Textile	1.96	
150203	Absorbents	0.35	
160103	Tyres	4.50	30.22
160504	HAZ Gases Cylinders		5.02
160505	Gas Cylinders		0.70
160601	HAZ Battery Lead Acid		3.954
170107	C&D	59.06	19.56
170201	Wood		1,973.54
170302	Bituminous Material	7.60	7.66
170401	Copper	0.26	
170405	Steel	540.26	
170504	Soil and Stone	3,849.20	12,991.52
170605	Asbestos		0.38
170802	Gypsum materials	255.27	
170904	C&D Inert Mixed	24,128.72	33,158.08
190203	Back End Floc	2,980.44	
190801	Screenings	28.88	
190905	Resin	10.50	
191001	Metal	50.08	
191204	Plastic	10.36	10.36
191207	Wood	28.90	3,064.62
191210	Solid Recovered Fuel (SRF)	14,409.52	15,397.77
191212	C&I Dry Mixed	5,765.96	33,670.74
200101	Cardboard & Paper	90.34	
200102	Glass	142.68	
200108	Biodegradable Kitchen & Canteen Waste	8,622.81	7,964.93

EWC	Description	Waste In (tonnes)	Waste Out (tonnes)
200135	REC Electronics & Electrics	0.30	12.24
200136	White Goods - WEE	0.42	
200138	Wood	5,509.38	4,940.05
200139	Plastic		5.96
200140	Metal	1,001.13	4,327.24
200201	Green Biodegradable Waste	2,289.94	2,474.88
200301	MSW Municipal Mixed	61,689.32	67,160.35
200303	Street Cleaning	388.28	271.14
200307	Bulky Waste	62,065.90	1,357.66
	Total received	194,431.75	
	Total consigned		189,235.65
	Recovery		174,158.14
	Disposal		15,077.51
	Recovery Rate (%)		92

Table 12 Waste Received & Consigned 2004 - 2018

Description	Total Received	Total Consigned
2018	227,071.93	223,431.11
2017	194,431.75	189,235.65
2016	87,154.13	84,900.67
2015	105,517.447	100,462.678
2014	80,987.80	79,850.41
2013	83,500.66	81,230.14
2012	92,484.12	87,448.73
2011	87,191	83,181
2010	74,694.50	68,868.59
2009	79,469.57	77,224.94
2008	133,813.88	129,366.26
2007	167,056.84	161,828.21
2006	79,570.21	80,725.68
2005	105,517.447	100,462.678
2004	80,987.80	79,850.41

5.2 Waste Management Record

The complete waste management record is contained in Appendix 3. This record contains the following details for all waste consigned off-site:

- European Waste Code (EWC)
- Quantity (Tonnes)
- Description of Waste (in line with applicable EWC code)
- Hazardous (Yes/No)
- Treatment Type (Recovered / Disposed / Recycled)
- Location of Treatment (Country)
- Name, Address & Licence/Permit No. of Destination

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Section 6 Environmental Incidents and Complaints

6.1 Incidents

There were no reportable incidents on site in 2018.

6.2 Register of Complaints

SEHL 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 2018.

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Section 7 Environmental Development

7.1 Environmental Management System

An Integrated Management System (IMS) has been implemented by SEHL 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. SEHL 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 SEHL 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 2018 and the proposed objectives and targets for 2019 are presented in **Table 14** and **Error! Reference source not found.**

7.1.1 Site Management

The management and staffing structure is outlined in Table 13.

Table 13: Management and Staffing Structure

Role	Experience
Director of Operations	17 years' waste management experience and has completed the FAS Waste Management course equivalent
Site Supervisor	22 years' experience in waste management and has completed the FAS Waste Management course equivalent
EHS Officer	9 years' experience and has completed the FAS Waste Management course equivalent
Weighbridge Manager	6.5 years' experience in Waste industry

7.1.2 Staff Training

No staff training with respect to Environmental Management took place in 2018.

7.2 Environmental Management Progression and Projected Programme

7.2.1 Progression of 2018 Objectives and Targets

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

Table 14: Progression of 2018 Objectives and Targets

No.	Objective	Target	Responsibility	Status
1	Nuisance management	Ensure odour/noise/dust management plans are followed and potential new sources are identified	Site management	On-going
2	Fire prevention	Implement recs from Fire Risk Assessments Update ERP & APP where applicable 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	ISO 14001 transition	Transition ISO 14001 to the 2015 standard	EHS team	On-going
5	Paperless project	Implement plans for a paperless office	All staff	On-going
6	Resource tracking	Sites to track energy usage and other resources in order to conserve wherever possible	Site management/EHS team	On-going
7	Hardstand & site infrastructure	Review hardstand and formulate repair plan as required. Record using EF11.	Site management/EHS team	On-going
8	Cover bunds	Install shelter over bunded area	Site management	On-going

7.2.2 Projected 2019 Objectives and Targets

The projected targets and objectives for 2019 are presented in **Table 15**.

Table 15 Objectives and Targets for 2019

No.	Objective	Target	Responsibility	Timescale
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 inline with licence conditions, fire prevention and insurance recommendations	Site management/EHS team	Q1 - Q4
4	Resource tracking	Sites to track energy usage and other resources in order to conserve wherever possible	Site management/EHS team	Q1 - Q4
5	Hardstand & site infrastructure	Review hardstand and formulate repair plan as required. Record using EF11.	Site management/EHS team	Q1 - Q4
6	Energy audits	Complete site specific energy audits	EHS team	Q2-Q4
7	Licence review	Complete licence review process to expand range of site operations	EHS team	Q2-4

No.	Objective	Target	Responsibility	Timescale
8	Fire detection cameras	Replace aspiration system with fire detection cameras	EHS team	Q3
9	Pipeline integrity testing	Complete CCTV review of drainage network	Site management	Q2

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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 maintained:

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

7.4 Nuisance Controls

SEHL contracts a vermin control company, Pestguard, to carry out nuisance control at the facility. Pestguard undertake a 6-weekly review of the vermin activity on-site along with an inspection of the bait traps that are located throughout the facility.

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 223,431.11 tonnes of waste consigned from the facility approximately 96.95% was sent for recovery.

7.6 DMP, ELRA & Financial Provision

A Decommissioning Management Plan (DMP) and Environmental Liabilities Risk Assessment (ELRA) including Financial Provision (FP) have been developed for the site and were submitted to the EPA in 2013. These have both been approved by the EPA and provision is in place with their agreement. A review and update of both reports was completed in 2018.

7.7 Rainwater and Wastewater Volumes

No rainwater was reused at the facility in 2018. The grey water reuse system has been de-commissioned. As it is not possible to give an exact figure for the amount of wastewater produced during 2018, an estimate of 6,600 m³ of water was used by the truck wash during the year.

Wastewater discharges to the sewer serving the industrial estate. The wastewater is treated at a waste water treatment plant operated by Irish Water.

Approximately 9.74 m³ of wastewater and sludge was removed from the drainage interceptors and transported off-site during the 2018 reporting period.

Section 8 Other Reports

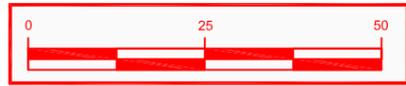
8.1 Environmental Performance Report

The Environmental Performance Report was submitted to the EPA via EDEN.

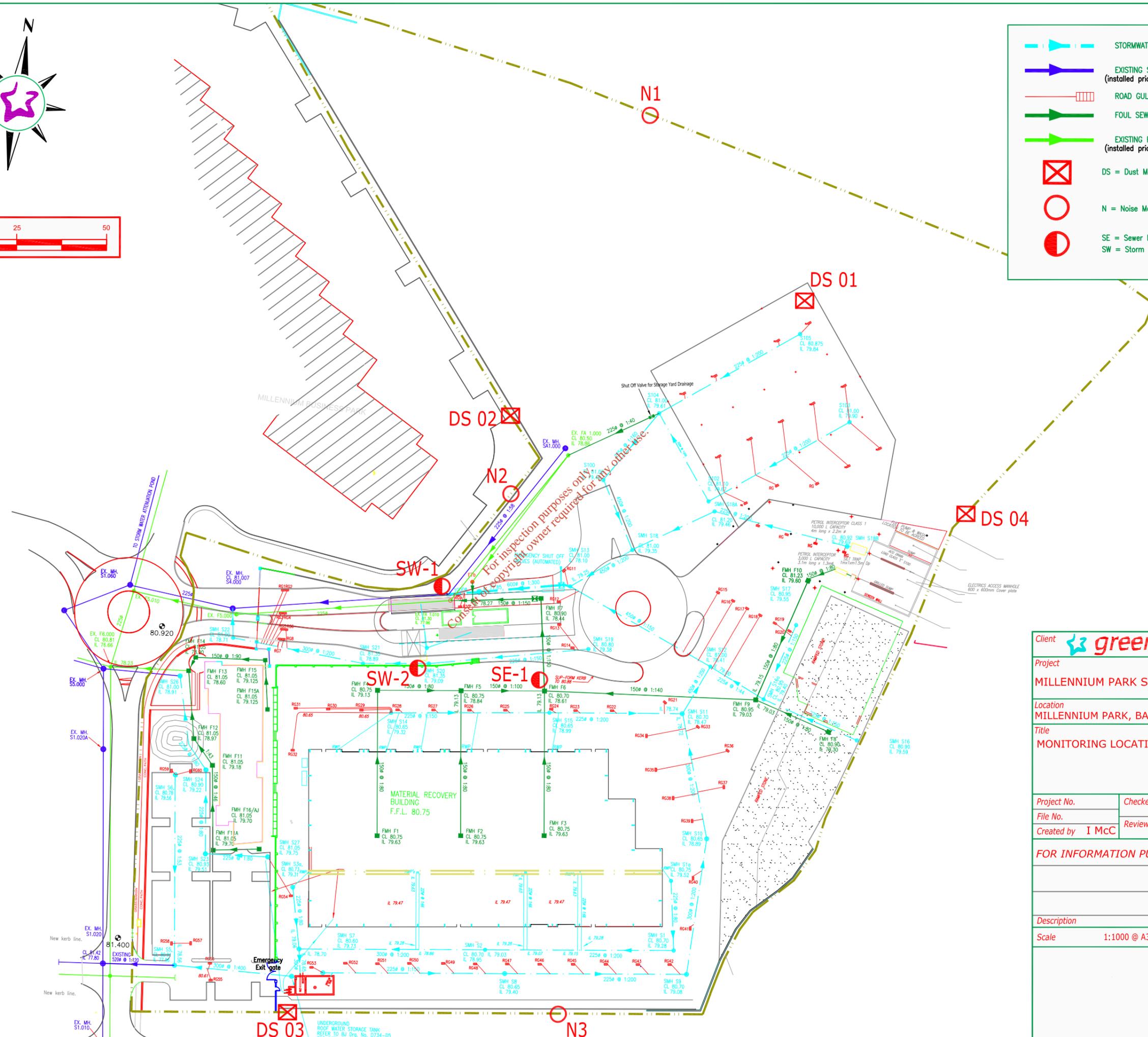
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Appendix 1: Sampling Locations

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	STORMWATER DRAINAGE
	EXISTING STORMWATER DRAINAGE (installed prior to facility construction)
	ROAD GULLIES AND CONNECTIONS
	FOUL SEWER DRAINAGE
	EXISTING FOUL SEWER DRAINAGE (installed prior to facility construction)
	DS = Dust Monitoring Point
	N = Noise Monitoring Point
	SE = Sewer Monitoring Point
	SW = Storm Water Monitoring Point



Client		
Project MILLENNIUM PARK SERVICES AS-BUILT		
Location MILLENNIUM PARK, BALLYCOOLIN, DUBLIN 11		
Title MONITORING LOCATIONS		
Project No.	Checked by	Drawing No.
File No.	Reviewed by	001
Created by I McC		
FOR INFORMATION PURPOSES		23/06/14 A
Description	Date	Version
Scale 1:1000 @ A3	Date	June 2015

Appendix 2: Integrated Management System

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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 02, 06/03/18
IP-03	Environmental Aspects & Impacts Procedure	Rev 02, 06/04/18
IP-04	Legal & Regulatory Requirements Procedure	Rev 01, 22/05/17
IP-05	Objectives, Targets & Management Programmes Procedure	Rev 02, 20/04/18
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 02, 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 02, 08/04/18
IP-16	Fire Prevention Procedure	Rev 02, 22/05/17
IP-17	Bin Washing Procedure	Rev 01, 22/05/17
IP-18	Accident Prevention Procedure	Rev 02, 12/07/18
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 03, 02/03/18
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



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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

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Amendment History

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

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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
02/03/18	37	SP 02	03	Include SF 066 – Fixed Plant Checksheet	POR
06/03/18	38	IP 02	02	Update RA scoring system	POR
22/03/18	39	IP 11	02	Include iAuditor	POR
02/04/18	40	IP 16	02	Remove Fire Warden	POR
06/04/18	41	IP 03	02	Lifecycle perspective	POR
08/04/18	42	IP 15	02	Remove Fire Warden	POR
20/04/18	43	IP 05	02	Include comp obligations, issues, Risks and opps.	POR
12/07/18	44	IP 18	02	Include Risk Table showing each SOP.	POR



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Approved By:	Malcolm Dowling – Group Compliance Manager	Page 5 of 5

Circulation List

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3	Greenstar Intranet – Electronic Copy

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Appendix 3: Waste Management Record

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EWC Code	Quantity (Tonnes)	Description of waste	Hazardous Y/N	Treatment Type - Recovered/ Disposed/ Recycled	Location Of Treatment - Country	Name, Address & Licence/Permit No. of Destination
150102	227.13	Plastic packaging	N	R13	Ireland	CLOUGHWATER PLASTICS IRELAND Rosemount Business Park, Ballycoolin road, Blanchardstown, Dublin 11, Dublin WFP-FG-08-0002-04
150102	9.5	Plastic packaging	N	R13	Ireland	CLOUGHWATER PLASTICS IRELAND Rosemount Business Park, Ballycoolin road, Blanchardstown, Dublin 11, Dublin WFP-FG-08-0002-04
150102	30.12	Plastic packaging	N	D05	Ireland	KNOCKHARLEY LANDFILL LIMITED, Knockharley, Navan, Meath, Ireland W0146
150102	4.4	Plastic packaging	N	R13	Ireland	LEINSTER ENVIRONMENTAL, Clermont Business Park, Haggardstown, Dundalk, Louth, Ireland, A91 HPK7 WFP-LH-09-0004-01
150102	105.43	Plastic packaging	N	R13	Ireland	LEINSTER ENVIRONMENTALS, Clermont Business Park, Haggardstown, Dundalk, Louth, Ireland, A91 HPK7 WFP-LH-09-0004-01
150103	3.4	Wooden packaging	N	R03	Ireland	BALLYMOUNT IPR, Ballymount Road, Walkinstown, Dublin 12, Dublin, Ireland, W0263
150104	1.34	Metallic packaging	N	R14	Ireland	Panda Waste - SLANE, Rathdrinagh, Beauparc, Navan, Meath, Ireland W0140
160103	38.96	End-of-life tyres	N	R13	Ireland	IPR WALKINSTOWN, Ballymount Road, Walkinstown, Dublin 12, Dublin, Ireland W0263
160103	8.26	End-of-life tyres	N	R14	Ireland	PANDA MERRYWELL (IPR), Merrywell Industrial Estate, Ballymount Road Lower, Ballymount, Dublin 12, Dublin, Ireland W0238
160504	3.1	Gases in pressure containers (including halons) containing hazardous substances	Y	R04	Ireland	BOC GAS DUBLIN, P.O. Box 201, Bluebell, Dublin 12, Dublin, Ireland
160601	0.48	Lead batteries	Y	R04	Ireland	KMK METALS RECYCLING LTD, Metals Recycling Limited - W0113 , Cappincur Industrial Estate, Daingean Road, Tullamore, Offaly, Ireland
160601	3.254	Lead batteries	Y	R04	Ireland	KMK Metals Recycling Limited - W0113 , Cappincur Industrial Estate, Daingean Road, Tullamore, Offaly, Ireland
170101	13.88	Concrete	N	R10	Ireland	HUNTSTOWN QUARRY/ROADSTONE, Huntstown Inert Waste Recovery Facility - W0277 Huntstown Quarry, Huntstown, Kilshane and Johnstown Townlands, Finglas, Dublin 11, Dublin, Ireland

EWG Code	Quantity (Tonnes)	Description of waste	Hazardous Y/N	Treatment Type - Recovered/ Disposed/ Recycled	Location Of Treatment - Country	Name, Address & Licence/Permit No. of Destination
170107	22.8	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	N	R13	Ireland	Roadstone Slane, WFP-MH-15-0002-01, Deerpark, Stackallan, Slane, Meath, Ireland, C15 F860
170107	80.96	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	N	R13	Ireland	Panda Waste – SLANE, Starrus Eco Holdings Limited - W0140 Rathdrinagh, Beauparc, Navan, Meath, Ireland
170107	17.14	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	N	R13	Ireland	HUNTSTOWN QUARRY/ROADSTONE, Huntstown Inert Waste Recovery Facility - W0277 Huntstown Quarry, Huntstown, Kilshane and Johnstown Townlands, Finglas, Dublin 11, Dublin, Ireland
170302	15.08	Bituminous mixtures other than those mentioned in 17 03 01	N	R10	Ireland	Roadstone Slane WFP-MH-15-0002-01 Deerpark, Stackallan, Slane, Meath, Ireland C15 F860
170405	11.7	Iron and steel	N	R04	Ireland	Panda Waste - SLANE SHED 1 Starrus Eco Holdings Limited - W0140 Rathdrinagh, Beauparc, Navan, Meath, Ireland
170504	22.7	Soil and stones other than those mentioned in 17 05 03	N	D05	Ireland	MARRAKESH, Kilmurry South - W0048 Bray, Wicklow, Ireland
170504	683.38	Soil and stones other than those mentioned in 17 05 03	N	R10	Ireland	HUNTSTOWN QUARRY/ROADSTONE, Huntstown Inert Waste Recovery Facility - W0277 Huntstown Quarry, Huntstown Kilshane and Johnstown Townlands, Finglas, Dublin 11, Dublin, Ireland
170802	16.36	Gypsum-based construction materials other than those mentioned in 17 08 01	N	R13	Ireland	Panda Waste - BALLYMOUNT (Veolia), Starrus Eco Holdings Limited - W0039 Ballymount Cross, Tallaght, Dublin 24, Dublin, Ireland
170904	1130.16	Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	N	R13	Ireland	BRAY MRF, Starrus Eco Holdings Limited (Fassaroe) - W0053 Bray Depot, La Vallee House, Fassaroe, Bray, Wicklow, Ireland
170904	24.26	Mixed construction and demolition wastes other	N	R13	Ireland	Panda Waste – CAPPAGH, Starrus Eco Holdings Limited - W0261 Cappagh Road, Finglas, Dublin 11, Dublin, Ireland

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EW Code	Quantity (Tonnes)	Description of waste	Hazardous Y/N	Treatment Type - Recovered/ Disposed/ Recycled	Location Of Treatment - Country	Name, Address & Licence/Permit No. of Destination
		than those mentioned in 17 09 01, 17 09 02 and 17 09 03				
170904	42234.53	Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	N	R13	Ireland	Panda Waste - SLANE SHED 1 Starrus Eco Holdings Limited - W0140 Rathdrinagh, Beuparc, Navan, Meath, Ireland
190902	9.74	Sludges from water clarification	N	R13	Ireland	MCBREEN ENVIRONMENTAL LTD, McBreen Environmental Drain Services Ltd WFP-CN-16-0001-01 Lismagratty, Cootehill Road, Cavan, Ireland
191001	197.98	Iron and steel waste	N	R04	United Kingdom	SIMS Metal Management, IRE/AG032/19 - 76-86 Duncrus Street Belfast Co. Antrim Belfast United Kingdom BT3 9AR
191204	46.34	Plastic and rubber	N	R13	Ireland	Cloughwater Plastics Ireland Ltd. WFP-FG-08-002-04 - Rosemount Business Park Ballycoolin Road Dublin 11 Dublin Ireland
191204	26.56	Plastic and rubber	N	R13	Ireland	Cloughwater Plastics Ireland Ltd. WFP-FG-08-002-04 - Rosemount Business Park Ballycoolin Road Dublin 11 Dublin Ireland
191204	34.1	Plastic and rubber	N	D05	Ireland	Knockharley Landfill - W0146 Knockharley Navan (Includes Townlands of Tuiterrath & Flemingstown) Meath Ireland
191207	8505.06	Wood other than that mentioned in 19 12 06	N	R13	Ireland	BRAY MRF, Starrus Eco Holdings Limited (Fassaroe) - W0053 Bray Depot La Vallee House Fassaroe Bray Wicklow Ireland
191207	68.72	Wood other than that mentioned in 19 12 07	N	R13	Ireland	Panda Waste – SLANE, Starrus Eco Holdings Limited - W0140 Rathdrinagh Beuparc Navan Meath Ireland
191207	20.38	Wood other than that mentioned in 19 12 08	N	R03	Ireland	Clonmel Waste Disposal Ltd WP-008-02 - Lawlesstown Clonmel Tipperary Ireland E91 K526
191207	35.16	Wood other than that mentioned in 19 12 09	N	R03	Ireland	Clonmel Waste Disposal Ltd WP-008-02 - Lawlesstown Clonmel Tipperary Ireland E91 K526
191207	8.54	Wood other than that mentioned in 19 12 10	N	R03	Ireland	Clonmel Waste Disposal Ltd WP-008-02 - Lawlesstown Clonmel Tipperary Ireland E91 K526
191207	32.86	Wood other than that mentioned in 19 12 11	N	R03	United Kingdom	McKinstry LN/13/45 83 Belfast Road Nutts Corner Crumlin Antrim United Kingdom

EWC Code	Quantity (Tonnes)	Description of waste	Hazardous Y/N	Treatment Type - Recovered/ Disposed/ Recycled	Location Of Treatment - Country	Name, Address & Licence/Permit No. of Destination
191209	111.8	Minerals (for example sand, stones)	N	R13	Ireland	Panda Waste – SLANE, Starrus Eco Holdings Limited - W0140 Rathdrinagh Beauparc Navan Meath Ireland
191209	28.72	Minerals (for example sand, stones)	N	R13	Ireland	MARRAKESH, Kilmurry South - W0048 Bray Wicklow Ireland
191209	37.78	Minerals (for example sand, stones)	N	R13	Ireland	HUNTSTOWN QUARRY/ROADSTONE, Huntstown Inert Waste Recovery Facility - W0277 Huntstown Quarry Huntstown Kilshane and Johnstown Townlands Finglas, Dublin 11 Dublin Ireland
191210	86.66	Combustible waste (refuse derived fuel)	N	R13	Ireland	BRAY MRF, Starrus Eco Holdings Limited (Fassaroe) - W0053 Bray Depot La Vallee House Fassaroe Bray Wicklow Ireland
191210	51.54	Combustible waste (refuse derived fuel)	N	R13	Ireland	Panda Waste – CAPPAGH, Starrus Eco Holdings Limited - W0261 Cappagh Road Finglas Dublin 11 Dublin Ireland
191210	23.06	Combustible waste (refuse derived fuel)	N	R13	Ireland	Panda Waste – SLANE, Starrus Eco Holdings Limited - W0140 Rathdrinagh Beauparc Navan Meath Ireland
191210	7955.04	Combustible waste (refuse derived fuel)	N	R01	Ireland	Irish Cement Limited (Platin) - P0030 Platin Works Platin Meath Ireland
191210	19778.42	Combustible waste (refuse derived fuel)	N	R01	Ireland	Lagan Cement - L1981 Killaskillen Kinnegad Westmeath Ireland N91 D510
191210	1283.19	Combustible waste (refuse derived fuel)	N	R01	Ireland	Quinn Cement Limited - P0378 Cement Works Scotchtown Ballyconnell Cavan Ireland
191212	221.36	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	N	R13	Ireland	BRAY MRF, Starrus Eco Holdings Limited (Fassaroe) - W0053 Bray Depot La Vallee House Fassaroe Bray Wicklow Ireland
191212	29.36	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 12	N	R13	Ireland	BRAY MRF, Starrus Eco Holdings Limited (Fassaroe) - W0053 Bray Depot La Vallee House Fassaroe Bray Wicklow Ireland
191212	729.16	Other wastes (including mixtures of materials) from mechanical treatment of	N	R13	Ireland	Panda Waste – CAPPAGH, Starrus Eco Holdings Limited - W0261 Cappagh Road Finglas Dublin 11 Dublin Ireland

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EWG Code	Quantity (Tonnes)	Description of waste	Hazardous Y/N	Treatment Type - Recovered/ Disposed/ Recycled	Location Of Treatment - Country	Name, Address & Licence/Permit No. of Destination
		wastes other than those mentioned in 19 12 13				
191212	23.92	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 14	N	R13	Ireland	Panda Waste - SLANE, Starrus Eco Holdings Limited - W0140 Rathdrinagh Beauparc Navan Meath Ireland
191212	24.88	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 15	N	R13	Ireland	Panda Waste – SLANE, Starrus Eco Holdings Limited - W0140 Rathdrinagh Beauparc Navan Meath Ireland
191212	66.48	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 16	N	R13	Ireland	Panda Waste – SLANE, Starrus Eco Holdings Limited - W0140 Rathdrinagh Beauparc Navan Meath Ireland
191212	43891.683	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 17	N	R13	Ireland	Panda Waste – SLANE, Starrus Eco Holdings Limited - W0140 Rathdrinagh Beauparc Navan Meath Ireland
191212	23.98	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 18	N	R13	Ireland	Panda Waste – SLANE, Starrus Eco Holdings Limited - W0140 Rathdrinagh Beauparc Navan Meath Ireland
191212	29.12	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 19	N	R13	Ireland	639 PW – SLANE, Starrus Eco Holdings Limited - W0140 Rathdrinagh Beauparc Navan Meath Ireland
191212	29.72	Other wastes (including mixtures of materials) from	N	R01	Ireland	Dublin Waste to Energy Limited - W0232 Pigeon House Road Poolbeg Peninsula Dublin 4 Dublin Ireland D04N2P2

EWG Code	Quantity (Tonnes)	Description of waste	Hazardous Y/N	Treatment Type - Recovered/ Disposed/ Recycled	Location Of Treatment - Country	Name, Address & Licence/Permit No. of Destination
		mechanical treatment of wastes other than those mentioned in 19 12 20				
191212	282.9	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 21	N	D01	Ireland	Knockharley Landfill - W0146 Knockharley Navan (Includes Townlands of Tuiterrath & Flemingstown) Meath Ireland
191212	2935.3	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 22	N	D01	Ireland	Knockharley Landfill - W0146 Knockharley Navan (Includes Townlands of Tuiterrath & Flemingstown) Meath Ireland
191212	823.82	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 23	N	D01	Ireland	Knockharley Landfill - W0146 Knockharley Navan (Includes Townlands of Tuiterrath & Flemingstown) Meath Ireland
200108	1024.02	Biodegradable kitchen and canteen waste	N	R13	Ireland	Panda Waste – CAPPAGH, Starrus Eco Holdings Limited - W0261 Cappagh Road Finglas Dublin 11 Dublin Ireland
200108	500.94	Biodegradable kitchen and canteen waste	N	R03	Ireland	Acorn Recycling Limited Ballybeg Composting Facility Ballybeg Littleton Co Tipperary Ireland
200108	62.16	Biodegradable kitchen and canteen waste	N	R03	Ireland	Enrich Environmental Limited - P1013 Larch Hill Stud Newtownrathganley Kilcock Meath Ireland
200108	23301.05	Biodegradable kitchen and canteen waste	N	R03	United Kingdom	Natural World Products IRE/AG032/17 Natural World Products Ltd 32 Glenside Road Dunmurray Co. Antrim United Kingdom BT17 0LH
200138	916.86	Wood other than that mentioned in 20 01 37	N	R13	Ireland	BRAY MRF, Starrus Eco Holdings Limited (Fassaroe) - W0053 Bray Depot La Vallee House Fassaroe Bray Wicklow Ireland
200138	13.92	Wood other than that mentioned in 20 01 38	N	R13	Ireland	Panda Waste – SLANE, Starrus Eco Holdings Limited - W0140 Rathdrinagh Beauparc Navan Meath Ireland
200138	587.38	Wood other than that mentioned in 20 01 39	N	R03	Ireland	Clonmel Waste Disposal Ltd WP-008-02 Lawlesstown Clonmel Tipperary Ireland E91 K526

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EWG Code	Quantity (Tonnes)	Description of waste	Hazardous Y/N	Treatment Type - Recovered/ Disposed/ Recycled	Location Of Treatment - Country	Name, Address & Licence/Permit No. of Destination
200138	409.42	Wood other than that mentioned in 20 01 40	N	R03	Ireland	Clonmel Waste Disposal Ltd WP-008-02 Lawlesstown Clonmel Tipperary Ireland E91 K526
200138	15.74	Wood other than that mentioned in 20 01 41	N	R03	Ireland	McKinistry Skip Hire Ltd IRE/AG032/19 81-83 Belfast Road Nuttscorner Crumlin Co. Antrim United Kingdom BT29 4TL
200140	35.98	Metals	N	R04	Ireland	Panda Waste – SLANE, Starrus Eco Holdings Limited - W0140 Rathdrinagh Beauparc Navan Meath Ireland
200140	949.22	Metals	N	R04	Ireland	Davis Recycling Ltd W0134 Unit 648 Jordanstown Drive Greenogue Business Park Rathcoole Dublin Ireland
200140	3055.16	Metals	N	R04	Ireland	Multimetals Recycling Ltd WFP-WW-09-0014-05 Bollarney The Murrough Industrila Estate The Murrough Co. Wicklow Ireland
200140	95.68	Metals	N	R04	Ireland	SIMS Metal Management IRE/AG032/19 76-86 Duncrus Street Belfast Co. Antrim United Kingdom BT3 9AR
200201	11.36	Biogradable Waste	N	R03	Ireland	Panda Waste - BALLYMOUNT (Veolia), Starrus Eco Holdings Limited - W0039 Ballymount Cross Tallaght Dublin 24 Dublin Ireland
200201	1743.96	Biogradable Waste	N	R03	Ireland	Enrich Environmental Ltd WMP 200/57 Kilcock Co. Kildare Ireland W23 W9DN
200301	84.94	Mixed Municipal Waste	N	R13	Ireland	Panda Waste - SDCC Baling Station - W0003 Ballymount Road Walkinstown Dublin 12 Dublin Ireland
200301	11.94	Mixed Municipal Waste	N	R13	Ireland	Panda Waste - BALLYMOUNT (Veolia), Starrus Eco Holdings Limited - W0039 Ballymount Cross Tallaght Dublin 24 Dublin Ireland
200301	6931.41	Mixed Municipal Waste	N	R13	Ireland	Panda Waste – CAPPAGH, Starrus Eco Holdings Limited - W0261 Cappagh Road Finglas Dublin 11 Dublin Ireland
200301	15.2	Mixed Municipal Waste	N	R13	Ireland	Panda Waste – SLANE, Starrus Eco Holdings Limited - W0140 Rathdrinagh Beauparc Navan Meath Ireland
200301	1052.74	Mixed Municipal Waste	N	D05	Ireland	Ballynagran Residual Landfill - W0165 Ballynagran Coolbeg and Kilcandra Wicklow Ireland
200301	38571.24	Mixed Municipal Waste	N	R05	Ireland	Dublin Waste to Energy Limited - W0232 Pigeon House Road Poolbeg Peninsula Dublin 4 Dublin Ireland D04N2P2
200301	37.86	Mixed Municipal Waste	N	R13	Ireland	PANDA Ballymount MRF (Merrywell) - W0238 Merrywell Industrial Estate Ballymount Road Lower Ballymount Dublin 12 Dublin Ireland
200301	8927.244	Mixed Municipal Waste	N	R01	Ireland	Indaver Ireland Limited (Duleek) - W0167 Carranstown Duleek Meath Ireland

EWC Code	Quantity (Tonnes)	Description of waste	Hazardous Y/N	Treatment Type - Recovered/ Disposed/ Recycled	Location Of Treatment - Country	Name, Address & Licence/Permit No. of Destination
200301	1176.07	Mixed Municipal Waste	N	D05	Ireland	Knockharley Landfill - W0146 Knockharley Navan (Includes Townlands of Tuiterrath & Flemingstown) Meath Ireland
200303	374.08	Street-cleaning residues	N	D05	Ireland	Knockharley Landfill - W0146 Knockharley Navan (Includes Townlands of Tuiterrath & Flemingstown) Meath Ireland
200307	24.14	Bulky waste	N	R13	Ireland	Starrus Eco Holdings Limited (Fassaroe) - W0053 Bray Depot La Vallee House Fassaroe Bray Wicklow Ireland
200307	99.54	Bulky waste	N	R13	Ireland	Panda Waste – CAPPAGH, Starrus Eco Holdings Limited - W0261 Cappagh Road Finglas Dublin 11 Dublin Ireland
200307	861.92	Bulky waste	N	R13	Ireland	Panda Waste - SLANE SHED 1 Starrus Eco Holdings Limited - W0140 Rathdrinagh Beauparc Navan Meath Ireland
200307	200.96	Bulky waste	N	R13	Ireland	Panda Waste - SLANE SHED 1 Starrus Eco Holdings Limited - W0140 Rathdrinagh Beauparc Navan Meath Ireland
200307	72.66	Bulky waste	N	R01	Ireland	Dublin Waste to Energy Limited - W0232 Pigeon House Road Poolbeg Peninsula Dublin 4 Dublin Ireland D04N2P2
200307	4.3	Bulky waste	N	R13	Ireland	Irish Packaging Recycling - W0263 Ballymount Road Walkinstown Dublin 12 Dublin Ireland
200307	100.36	Bulky waste	N	D05 & R13	Ireland	Knockharley Landfill - W0146 Knockharley Navan (Includes Townlands of Tuiterrath & Flemingstown) Meath Ireland

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