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ANNUAL ENVIRONMENTAL REPORT

STARRUS ECO HOLDINGS LIMITED

MATERIALS RECOVERY FACILITY

DOCK ROAD, LIMERICK

LICENCE NO. W0082-03

JANUARY 2016 – DECEMBER 2016

Prepared For: -

Starrus Eco Holdings Ltd. (SEHL),
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Project	Annual Environmental Report 2016			
Client	Starrus Eco Holdings Ltd. W0082-03			
Report No	Date	Status	Prepared By	Reviewed By
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1. INTRODUCTION

This is the 2016 Annual Environmental Report (AER) for the Starrus Eco Holdings Ltd. (SEHL), Materials Recovery Facility (MRF) at Ballykeefe, Dock Road, Limerick and covers the reporting period January to December 2016. A revised Industrial Emission (IED) Licence (W0082-03) for the installation was issued on the 15th May 2015.

The content is based on Schedule F of the Licence and the report format follows guidelines set in the "Guidance Note for Annual Environmental Report" issued by the Environmental Protection Agency (Agency)[1]. Cognisance was also taken of the Agency AER Draft Guidance Document and Draft AER Templates issued in January 2013[2].

[1] EPA (Environmental Protection Agency) 1999 Waste Licensing – Draft Guidance on Environmental Management Systems and Reporting to the Agency

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

2. SITE DESCRIPTION

2.1 Site Location and Layout

The installation is located on the Dock Road in Limerick, in an area dominated by industrial and commercial buildings and activities. It is adjacent to the N69, on the main Limerick to Foynes road.

There are two adjoining buildings, comprising a recycling area and transfer area. There is also a separate office building and adjoining vehicle and plant maintenance workshop located close to the site entrance. The open yard areas are paved and are used for external waste storage bays (C&D, glass, metals and timber), storage of wrapped baled waste, skip storage, truck parking and a vehicle washing area (not in use during the reporting period). The entire site, including the floors of the transfer buildings and the open yards, are paved with concrete.

2.2 Waste Management Activities

The Licence allows SEHL to accept and process 130,000 tonnes of commercial and industrial, construction and demolition and municipal wastes.

2.2.1 Waste Types & Processes

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

- Municipal waste including biodegradable kitchen and canteen waste
- Packaging waste
- Commercial waste
- Industrial waste
- Construction and demolition waste
- Waste derived from the treatment of waste
- Street sweepings
- Metal waste

No hazardous wastes or liquid waste are accepted. The maximum amount of each waste type accepted, may be altered with the prior agreement of the Agency, as long as the total maximum tonnage is not exceeded.

The key processes carried out at the installation include: -

- Segregation of recyclable materials (paper, cardboards, plastic, wood, metals, glass);
- Bulking up of Municipal Solid Waste;
- Segregation and bulking of C&D waste;
- Transfer of recovered and residual materials to appropriately licensed recycling, recovery and disposal outlets, and
- Timber shredding
- Baling and wrapping of waste material (20 03 01)
- Collection of waste at the Civic Amenity Area.

Commercial and Industrial Waste

Both mixed and segregated commercial waste is collected from commercial sources. Commercial waste rich in recyclables (paper, cardboard, glass, metal, green waste and wood) is delivered by both permitted third party hauliers and by SEHL vehicles. Plastic, card and paper are baled and stored prior to transfer to a suitable permitted/licensed off-site recycling outlet. Timber recovered from the mixed C&I waste stream and that delivered to the installation as a single waste stream is bulked on-site prior to onward transfer to authorised facility. Biodegradable wastes suitable for composting are sent to an offsite composting facility. The remaining non-recyclable material is bulked and sent to appropriate licensed facilities.

C&D Waste

Waste loads include mixed construction and demolition wastes and soil and stone. The material arrives in skips of varying sizes. The loads are inspected, with any plasterboard removed and placed in a dedicated skip located inside the building, and the remainder off loaded into an external C&D bay. The majority of the incoming waste is recovered and sent off-site either for re-use or recovery. The non-recyclable materials are transferred to a licensed landfill.

Municipal Waste

All mixed MSW is handled inside the building. The incoming waste is deposited on the floor of the building and is then compacted, for removal and disposal at an approved residual landfill facility or re-directed to the onsite baler for the production of wrapped bales of waste material for export to approved recovery facilities.

Timber Shredding

Untreated timber pallets and untreated construction timbers were formerly shredded in the northern area of the yard and stored in a shred timber bay prior to dispatch either for use as a compost bulking/aeration agent, or as raw material for chipboard/MDF manufacturers. This activity did not take place during 2016.

2.2.2 Plant List

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

Table 2.1 Existing Plant

No.	Plant	Operational Capacity tpd	Standby Capacity tpd
1	360° case Excavator	300	200
1	Volvo Loading Shovel	500	350
1	Doppstadt shredder	200	150
1	Cardboard baler	100	75
1	Waste Baler	350	200
1	JCB tele-porter	350	200
1	360 Cat Elevated	300	200
1	3 ton forklift		
1	Jungenheinrich forklift	100	75

3. EMISSION MONITORING

The monitoring specified in the licence includes surface water, wastewater, groundwater, dust and noise monitoring. The monitoring locations are shown on Figure 3.1. The monitoring results are included in reports submitted to the Agency at quarterly intervals and an overview of the monitoring completed in 2016 is presented in this Section.

3.1 Surface Water Monitoring

Surface water is generated by rainfall on roofs and the paved open yard areas. The run-off is collected and is currently discharged via 1 No. three chambered interceptor near the eastern boundary of the site to a manmade drain that runs alongside three boundaries of the installation. This drain discharges to the Bunlicky Lake, which ultimately joins the River Shannon.

The Licence requires surface water monitoring at two discharge points from the oil interceptor (FE1A and FE1B). FE1B is at the overflow point and the only flow occurs during periods of very high rainfall. Following discussions with the Agency in January 2012 the discharge point FE1B was sealed and all discharges from the interceptor are directed through FE1A.

Monitoring is also required in the drain upstream (WS9) and downstream (WS10) of the discharge point. The licence requires monthly monitoring of the surface water discharged from the site along with the upstream and downstream locations.

From May 2015, the revised Licence requires weekly monitoring of the surface water discharge point FE-1A. Due to periods of dry weather, no sampling was carried out in July and September 2016. In October 2016 SEHL ceased to discharge the surface water from site. The surface water was stored in a collection tank prior to collection and disposal at the nearby Bunlicky WWTP. Therefore no samples were taken in Q4 2016.

The monitoring results are in Tables 3.1 to 3.8. The tables include the trigger levels set in the revised licence (W0082-03), the trigger levels set in the previous licence (W0082-02) and the Environmental Quality Standards from the Surface Water Regulations 2009. The trigger level for BOD was exceeded during every monitoring event in 2016. The revised trigger level for Total Ammonia was exceeded in every monitoring even in 2016. The trigger level for Total Suspended Solids was exceeded in January, June, and August 2016. The agency were notified at the time of the exceedances, along with the Inland Fisheries Board and Limerick City & County Council.

Table 3.1 Surface Water Monitoring Results – 8th January 2016

Parameter	Units	WS9 - UP	FE1A Discharge	WS10-DOWN	FE-1a Range 2011 - 2016	W082-03 Trigger Levels	W082-02 ELV	EQS
pH	pH units	7.89	7.09	7.37		-	-	*6-9-*
Conductivity	µS/cm	155	223	277		-	-	-
COD	mg/l	18	90	43		-	-	-
BOD	mg/l	3	78	34	*3-176*	*2.6*	*25*	*2.6*
Total Ammonia	mg/l	0.082	0.473	0.299	*0.061 – 5.46*	*0.14*	-	*0.14*
Total Nitrogen	mg/l	<2.5	<2.5	<2.5		-	-	-
TOC	ug/l	1.23	14.73	3.5		-	-	-
Fats, Oils & Greases	mg/l	<1	<1	<1		-	-	-
Total Suspended Solids	mg/l	12	27	21	*<1 - 130*	*25*	*60*	-
Mineral Oil	mg/l	<1	<1	<1		-	*5*	*0.01*
Arsenic - dissolved	ug/l	-	<0.045	-		-	-	*25*
Cadmium - dissolved	ug/l	-	<0.13	-		-	-	*0.6*
Chromium - dissolved	ug/l	-	1.46	-		-	-	*30*
Copper - dissolved	ug/l	-	2.95	-		-	-	*30*
Mercury - dissolved	ug/l	-	<0.001	-		-	-	*0.07*
Nickel - dissolved	ug/l	-	2.24	-		-	-	*20*
Lead - dissolved	ug/l	-	0.98	-		-	-	*10*
Zinc - dissolved	ug/l	-	30	-		-	-	*100*

* ELV & Trigger applies to discharges – FE1A only.

Table 3.2 Surface Water Monitoring Results -11th February 2016

Parameter	Units	WS9 - UP	FE1A Discharge	WS10-DOWN	Range 2011-2016	W082-03 Trigger Levels	W082-02 ELVs	EQS
pH	pH units	7.64	7.25	7.59		-	-	*6-9*
Conductivity	µS/cm	838	378	880		-	-	-
COD	mg/l	20	50	38		-	-	-
BOD	mg/l	2	24	4	*3-176*	*2.6*	*25*	*2.6*
Total Ammonia	mg/l	1.29	0.96	1.29	*0.061-5.46*	*0.14*	-	*0.14*
Total Nitrogen	mg/l	2.8	2.8	3.4		-	-	-
TOC	mg/l	4	9	5		-	-	-
Fats, Oils & Greases	mg/l	<0.01	<0.01	<0.01		-	-	-
Total Suspended Solids	mg/l	<10	12	12	*<1-130*	*25*	*60*	-
Mineral Oil	mg/l	<0.01	<0.01	<0.01		-	-	*0.01*
Arsenic - dissolved	ug/l	-	<2.5	-		-	-	*25*
Cadmium - dissolved	ug/l	-	<0.5	-		-	-	*0.6*
Chromium - dissolved	ug/l	-	<1.5	-		-	-	*30*
Copper - dissolved	ug/l	-	<7	-		-	-	*30*
Mercury - dissolved	ug/l	-	<1	-		-	-	*0.07*
Nickel - dissolved	ug/l	-	<2	-		-	-	*20*
Lead - dissolved	ug/l	-	<5	-		-	-	*10*
Zinc - dissolved	ug/l	-	13	-		-	-	*100*

* ELV & Trigger applies to discharges – FE1A only.

Table 3.3 Surface Water Monitoring Results – 11th March 2016

Parameter	Units	WS9 - UP	FE1A Discharge	WS10-DOWN	Range 2011-2016	W082-03 Trigger Levels	W082-02 ELV	EQS
pH	pH units	7.71	6.87	7.06		-	-	*6-9*
Conductivity	µS/cm	316	365	463		-	-	-
COD	mg/l	19	119	24		-	-	-
BOD	mg/l	2	24	9	*3-176*	*2.6*	*25*	*2.6*
Total Ammonia	mg/l	0.33	1.38	0.82	*0.061-5.46*	*0.14*	-	*0.14-*
Total Nitrogen	mg/l	2.5	4.6	2.9		-	-	-
TOC	ug/l	2	20	4		-	-	-
Fats, Oils & Greases	mg/l	-	-	-		-	-	-
Total Suspended Solids	mg/l	<10	24	<10	*<1-130*	*25*	*60*	-
Mineral Oil	mg/l	<0.01	0.210	<0.01		-	*5*	*0.01*
Arsenic - dissolved	ug/l	-	<2.5	-		-	-	*25*
Cadmium - dissolved	ug/l	-	<0.5	-		-	-	*0.6*
Chromium - dissolved	ug/l	-	<1.5	-		-	-	*30*
Copper - dissolved	ug/l	-	<7	-		-	-	*30*
Mercury - dissolved	ug/l	-	<1	-		-	-	*0.07*
Nickel - dissolved	ug/l	-	3	-		-	-	*20*
Lead - dissolved	ug/l	-	<5	-		-	-	*10*
Zinc - dissolved	ug/l	-	20	-		-	-	*100*

* ELV & Trigger applies to discharges – FE1A only.

Table 3.4 Surface Water Monitoring Results – 14th April 2016

Parameter	Units	WS9 - UP	FE1A Discharge	WS10-DOWN	FE-1a Range 2011 - 2016	W082-03 Trigger Levels	W082-02 ELV	EQS
pH	pH units	7.53	7.02	7.27		-	-	*6-9*
Conductivity	µS/cm	838	555	764		-	-	-
COD	mg/l	32	47	36		-	-	-
BOD	mg/l	4	20	9	*3-176*	*2.6*	*25*	*2.6*
Total Ammonia	mg/l	1.53	1.3	1.39	*0.061 – 5.46*	*0.14*	-	*0.14*
Total Nitrogen	mg/l	3.9	3.5	3.2		-	-	-
TOC	ug/l	12	12	8		-	-	-
Fats, Oils & Greases	mg/l	<0.01	<0.01	<0.01		-	-	-
Total Suspended Solids	mg/l	<10	13	13	*<1 - 130*	*25*	*60*	-
Mineral Oil	mg/l	<0.01	<0.01	<0.01		-	*5*	*0.01*
Arsenic – dissolved	ug/l	-	<2.5	-		-	-	*25*
Cadmium - dissolved	ug/l	-	<0.5	-		-	-	*0.6*
Chromium - dissolved	ug/l	-	<1.5	-		-	-	*30*
Copper - dissolved	ug/l	-	<7	-		-	-	*30*
Mercury - dissolved	ug/l	-	<1	-		-	-	*0.07*
Nickel - dissolved	ug/l	-	<2	-		-	-	*20*
Lead - dissolved	ug/l	-	<5	-		-	-	*10*
Zinc - dissolved	ug/l	-	3	-		-	-	*100*

* ELV & Trigger applies to discharges – FE1A only.

Table 3.5 Surface Water Monitoring Results – 31st May 2016

Parameter	Units	WS9 - UP	FE1A Discharge	WS10-DOWN	Range 2011-2016	W082-03 Trigger Levels	W082-02 ELVs	EQS
pH	pH units	7.37	6.85	7.28		-	-	*6-9*
Conductivity	µS/cm	683	548	650		-	-	-
COD	mg/l	102	185	82		-	-	-
BOD	mg/l	15	109	37	*3-176*	*2.6*	*25*	*2.6*
Total Ammonia	mg/l	7.35	2.57	7.88	*0.061-5.46*	*0.14*	-	*0.14*
Total Nitrogen	mg/l	10.1	7.7	10.1		-	-	-
TOC	mg/l	23	52	23		-	-	-
Fats, Oils & Greases	mg/l	0.15	0.12	0.38		-	-	-
Total Suspended Solids	mg/l	16	18	15	*<1-130*	*25*	*60*	-
Mineral Oil	mg/l	0.15	0.12	0.38		-	-	*0.01*
Arsenic - dissolved	ug/l	-	<2.5	-		-	-	*25*
Cadmium - dissolved	ug/l	-	<0.5	-		-	-	*0.6*
Chromium - dissolved	ug/l	-	<1.5	-		-	-	*30*
Copper - dissolved	ug/l	-	<7	-		-	-	*30*
Mercury - dissolved	ug/l	-	<1	-		-	-	*0.07*
Nickel - dissolved	ug/l	-	6	-		-	-	*20*
Lead - dissolved	ug/l	-	<5	-		-	-	*10*
Zinc - dissolved	ug/l	-	30	-		-	-	*100*

* ELV & Trigger applies to discharges – FE1A only.

Table 3.6 Surface Water Monitoring Results – 30th June 2016

Parameter	Units	WS9 - UP	FE1A Discharge	WS10-DOWN	Range 2011-2016	W082-03 Trigger Levels	W082-02 ELV	EQS
pH	pH units	7.19	6.87	7.43		-	-	*6-9*
Conductivity	µS/cm	974	603	891		-	-	-
COD	mg/l	393	255	186		-	-	-
BOD	mg/l	258	151	117	*3-176*	*2.6*	*25*	*2.6*
Total Ammonia	mg/l	17.87	8.78	15.08	*0.061-5.46*	*0.14*	-	*0.14*
Total Nitrogen	mg/l	20.3	15.4	17.8		-	-	-
TOC	ug/l	144	88	63		-	-	-
Fats, Oils & Greases	mg/l	<0.01	<0.01	<0.01		-	-	-
Total Suspended Solids	mg/l	23	64	33	*<1-130*	*25*	*60*	-
Mineral Oil	mg/l	<0.01	<0.01	<0.01		-	*5*	*0.01*
Arsenic - dissolved	ug/l	-	<2.5	-		-	-	*25*
Cadmium - dissolved	ug/l	-	<0.5	-		-	-	*0.6*
Chromium - dissolved	ug/l	-	<1.5	-		-	-	*30*
Copper - dissolved	ug/l	-	<7	-		-	-	*30*
Mercury - dissolved	ug/l	-	<1	-		-	-	*0.07*
Nickel - dissolved	ug/l	-	8	-		-	-	*20*
Lead - dissolved	ug/l	-	<5	-		-	-	*10*
Zinc - dissolved	ug/l	-	51	-		-	-	*100*

* ELV & Trigger applies to discharges – FE1A only.

Table 3.7 Surface Water Monitoring Results – 25th August 2016

Parameter	Units	WS9 - UP	FE1A Discharge	WS10-DOWN	Range 2011-2016		W082-03 Trigger Levels	W082-02 ELVs	EQS
pH	pH units	7.54	6.89	7.38			-	-	*6-9*
Conductivity	µS/cm	54	410	487			-	-	-
COD	mg/l	23	15	51			-	-	-
BOD	mg/l	4	21	14	*3-176*		*2.6*	*25*	*2.6*
Total Ammonia	mg/l	1.67	1.48	2.10	*0.061-5.46*		*0.14*	-	*0.14*
Total Nitrogen	mg/l	3.4	5.9	4.6			-	-	-
TOC	mg/l	6	32	7			-	-	-
Fats, Oils & Greases	mg/l	<0.01	<0.01	<0.01			-	-	-
Total Suspended Solids	mg/l	12	27	16	*<1-130*		*25*	*60*	-
Mineral Oil	mg/l	<0.01	<0.01	<0.01			-	-	*0.01*
Arsenic – dissolved	ug/l	-	<2.5	-			-	-	*25*
Cadmium - dissolved	ug/l	-	<0.5	-			-	-	*0.6*
Chromium - dissolved	ug/l	-	<1.5	-			-	-	*30*
Copper - dissolved	ug/l	-	<7	-			-	-	*30*
Mercury - dissolved	ug/l	-	<1	-			-	-	*0.07*
Nickel - dissolved	ug/l	-	<2	-			-	-	*20*
Lead - dissolved	ug/l	-	<5	-			-	-	*10*
Zinc - dissolved	ug/l	-	23	-			-	-	*100*

* ELV & Trigger applies to discharges – FE1A only.

Table 3.8 FE1A Surface Water Monitoring Weekly results – 2016

Parameter	Units	13th Jan	21st Jan	29th Jan	5th Feb	17th Feb	25th Feb	4th March	W082-03 Trigger Levels	W082-02 ELV	EQS
pH	pH units	7.23	6.72	7.15	6.54	6.71	7.01	7.11	-	-	*6-9*
Conductivity	µS/cm	929	630	685	687	247	513	521	-	-	-
COD	mg/l	116	214	62	160	85	54	113	-	-	-
BOD	mg/l	50	104	22	88	24	24	17	*2.6*	*25*	*2.6*
Total Ammonia	mg/l	1.967	2.54	1.232	2.213	0.59	1.66	0.96	*0.14*	-	*0.14*
Total Nitrogen	mg/l	4.1	7.37	<2.5	6.230	2.7	3.4	2.7	-	-	-
TOC	ug/l	28.77	41.55	14.98	52.37	8	11	8	-	-	-

Parameter	Units	24th March	31st March	6th April	21st April	28th April	4th May	16th June	W082-03 Trigger Levels	W082-02 ELV	EQS
pH	pH units	6.56	6.81	6.79	7.03	7.21	6.99	6.94	-	-	*6-9*
Conductivity	µS/cm	601	591	661	614	813	589	509	-	-	-
COD	mg/l	225	96	178	123	104	174	157	-	-	-
BOD	mg/l	130	52	87	63	44	106	85	*2.6*	*25*	*2.6*
Total Ammonia	mg/l	3.96	1.62	0.92	3.07	1.64	2.94	3.06	*0.14*	-	*0.14*
Total Nitrogen	mg/l	10.2	4.5	5	7.3	5.5	6.6	9.2	-	-	-
TOC	ug/l	64	21	32	25	15	63	44	-	-	-

* ELV & Trigger applies to discharges – FE1A only.

3.2 Foul water Monitoring

Foul water is treated in the on-site Klargestor treatment plant, with the treated effluent discharged to an on-site percolation area. Following a request by the Agency in December 2011 a detailed Waste Water Treatment System Risk Assessment was completed by IE Consulting Engineers in 2012. Further flow monitoring data suggests that there is a total average daily flow of approximately 18m^3/day, of which 67% originates upstream of the SEHL site.

Foul water monitoring is required at two monitoring locations - FE2a which is the discharge from the treatment plant and FE2b which is the truckwash discharge. The truckwash has not been used since Q3 2010 and therefore no samples were collected at FE2b in the reporting period.

The monitoring results are included on Table 3.9. There are no ELVs set in the licence and for comparative purposes the table includes the performance standards set in the EPA Waste Water Treatment Manual Guidelines.

The sample is rainfall dependent and therefore no sample could be taken in May, June, July, September and October 2016. Due to an error in the laboratory, no results are available for the sample taken in November. Throughout the year there were exceedances of the performance standards for BOD (6 occasions), TSS (6 occasions) and Ammoniacal Nitrogen (5 occasions).

The treated effluent discharges to ground and it is understood that the percolation area is not categorised as being located in a nutritionally sensitive area.

Subject to final wayleave agreement from Limerick City and County Council, it is intended to construct a connecting pipeline to the nearby municipal waste water treatment plant. Following this, waste water from the installation including trade effluent will be discharged to the municipal plant and the on-site system will be decommissioned. It is hoped that construction can be completed in 2017. Foul water is currently being tankered off site to the WWTP.

Table 3.9 – Foul Water Monitoring Results 2016

Parameter	Units	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec	Performance Standards
pH	pH units	7.43	7.43	7.93	7.66	NS	NS	NS	7.45	NS	NS	**	7.21	-
BOD	mg/l	333	24	13	21	NS	NS	NS	48	NS	NS	**	188	*20*
TSS	mg/l	40	57	35	74	NS	NS	NS	36	NS	NS	**	575	*30*
Ammonia Nitrogen	mg/l	26.725	16.31	89.24	25.37	NS	NS	NS	30.65	NS	NS	**	28.416	*20*
Fats Oils Grease	mg/l	2.626	<0.01	<0.01	<0.01	NS	NS	NS	<0.01	NS	NS	**	18.32	-
Sulphate	mg/l	46.838	224.94	187.75	150.02	NS	NS	NS	70.9	NS	NS	**	43.685	-
Total Phosphorous	mg/l	<2	1.037	3.069	0.031	NS	NS	NS	8.014	NS	NS	**	4.1	-
Total Nitrogen	mg/l	34.66	25.2	102	53.10	NS	NS	NS	41	NS	NS	**	35.3	-
Nitrate	mg/l	<21.2	0.3	16.9	65.4	NS	NS	NS	<0.2	NS	NS	**	<21.2	-
Nitrite	mg/l	<0.660	<0.02	1.81	20.27	NS	NS	NS	<0.02	NS	NS	**	<0.66	-
COD	mg/l	876	142	86	138	NS	NS	NS	281	NS	NS	**	575	-

NS – No Sample
** - Lab error

3.3 Groundwater Monitoring

Groundwater monitoring is carried out bi-annually at three wells, GWM1, GWM2 and GWM3. GWM1 is close to the entrance to the dry recyclables recycling building, GWM2 is at the northern site boundary and is downgradient of site activities. GWM3 is outside the operational area and is upgradient of site activities.

There are no ELVs or Trigger Levels set in the Licence. For interpretation purposes the results had, up to Q2 2011, been compared to the Interim Guideline Values (IGV) for groundwater published by the Agency. Since then, the results are also compared to the Threshold Values for groundwater (GTV) quality introduced by the European Communities Environmental Objectives (Groundwater) Regulations 2010 S.I. No 9 of 2010. The IGV levels represent typical background or unpolluted conditions, however levels higher than the IGV can occur naturally, depending on the local geological and hydrogeological conditions. While the Threshold Values are more appropriate for large scale abstraction wells used for potable supply, they can be used to assess the significance of contamination where present in groundwater. Because not all parameters monitored have been assigned Threshold Values, the relevant IGV continue to be used for comparative purposes.

In October 2013, OCM on behalf of SEHL submitted proposed groundwater trigger levels for the Agency's approval. Although the proposed trigger levels have not yet been approved they are included for information purposes in Table 3.10. The monitoring results are summarised in Tables 3.11 and 3.12.

The results are generally consistent with those of previous monitoring events which have found elevated levels of ammoniacal nitrogen at each location. Although the ammoniacal nitrogen levels exceeded the GTV levels the proposed trigger levels were not exceeded. In November, the GTV for Chloride was exceeded at GWM2, the reason for this exceedance is unknown, but will be investigated further in 2017.

Although hydrocarbons occurred intermittently at GWM1 and GWM3 in 2013 none have been measured since 2014. The reason for the low levels of hydrocarbons detected at GWM1 and GWM3 in 2013 is unknown. There have been no known incidents at the installation likely to have caused contamination.

Table 3.10 Proposed Trigger Levels

Borehole	Electrical Conductivity Proposed Trigger Level (mS/cm)	Ammoniacal Nitrogen Proposed Trigger Level (mg/l)
GWM1	1.140	11.89
GWM2	1.790	10.31
GWM3	1.120	1.87

Table 3.11- Groundwater Monitoring Results – May 2016

Parameter	Units	GWM1	GWM2	GWM3	TV	IGV
Water Level**	mBGL	2.23	n/r	1.58	-	-
Temperature**	°C	13.2	13.0	12.7	-	25
pH**	pH Units	6.75	6.99	7.09	-	6.5 - 9.5
COD	mg/l	41	30	10	-	-
BOD	mg/l	9	2	<1	-	-
Total Suspended Solids	mg/l	694	525	168	-	-
Total Ammonia (as NH_3)	mg/l	10.67	4.66	0.95	0.65 - 0.175	-
Total Nitrogen	mg/l	11.1	5.8	2.0	-	NAC
Mineral Oils	mg/l	<0.010	<0.010	<0.010	-	0.01
Sulphate	mg/l	5.23	49.66	17.10	187.5	-
Total Phosphorous	mg/l	1.231	0.647	0.119	-	-
Nitrate (as NO_3)	mg/l	1.5	1.2	0.9	37.5	-
Nitrite (as NO_2)	mg/l	0.02	0.04	<0.02	0.375	-
Fats, Oils & Greases	mg/l	<0.010	<0.010	<0.010	-	-
Diesel Range Organics	mg/l	<0.010	<0.010	<0.010	-	0.01
Aliphatic Hydrocarbons	mg/l	<0.010	<0.010	<0.010	-	0.01
Undecane	mg/l	<0.010	<0.010	<0.010	-	-
Conductivity**	mS/cm	1.225	1.075	0.807	0.8 - 1.875	-
Chloride	mg/l	140.9	81.4	89.2	24 - 187.5	-
Fluoride	mg/l	<0.3	<0.3	<0.3	-	1

** Field Readings
n/r – Not Recorded (well head damaged – not able to obtain water level)

Table 3.12 - Groundwater Monitoring Results – November 2016

Parameter	Units	GWM1	GWM2	GWM3	TV	IGV
Water Level**	mBGL	2.17	n/r	1.45	-	-
Temperature**	°C	12.2	11.4	12.1	-	25
pH**	pH Units	7.29	7.43	7.61	-	6.5 - 9.5
COD	mg/l	30	30	<7	-	-
BOD	mg/l	13	7	2	-	-
Total Suspended Solids	mg/l	612	1,063	76	-	-
Total Ammonia (as NH_3)	mg/l	10.40	8.53	1.08	0.65 - 0.175	-
Total Nitrogen	mg/l	11.8	9.3	2.9	-	NAC
Mineral Oils	mg/l	<0.010	<0.010	<0.010	-	0.01
Sulphate	mg/l	1	8.1	22.9	187.5	-
Total Phosphorous	mg/l	1.181	0.938	0.113	-	-
Nitrate (as NO_3)	mg/l	2.3	<0.2	<0.2	37.5	-
Nitrite (as NO_2)	mg/l	<0.02	<0.02	<0.02	0.375	-
Fats, Oils & Greases	mg/l	<0.010	<0.010	<0.010	-	-
Diesel Range Organics	mg/l	<0.010	<0.010	<0.010	-	0.01
Aliphatic Hydrocarbons	mg/l	<0.010	<0.010	<0.010	-	0.01
Undecane	mg/l	<0.010	<0.010	<0.010	-	-
Conductivity**	mS/cm	1.448	1.419	0.897	0.8 - 1.875	-
Chloride	mg/l	152.7	192.6	84	24 - 187.5	-
Fluoride	mg/l	<0.3	0.3	0.6	-	1

** Field Readings
n/r – Not Recorded (well head damaged – not able to obtain water level)

3.4 Noise Monitoring

The annual noise survey was carried out on the 25th November 2016 at three onsite boundary monitoring (NI1 – NI3) locations and one offsite location (NI4). The survey was conducted when the site was fully operational and confirmed that noise emissions fully complied with the licence conditions and that the installation is not impacting negatively on the nearest sensitive receptors. A summary of the noise results is shown on Table 3.13.

Noise limits set out in the waste licence are considered applicable to Noise Sensitive Locations (NSLs). An inspection of the nearest NSLs during the survey indicated that installation operations were not audible, and thus lower than the 55 dB daytime noise limit. The three onsite locations are dominated by installation activities but there are no NSLs in the vicinity of these locations. At NI4, site emissions were not audible.

Table 3.13 Noise Monitoring Results 2016

Station	Date	Time	Wind vector	$L_{Aeq\ 30\ min}$ dB	$L_{AF10\ 30\ min}$ dB	$L_{AF90\ 30\ min}$ dB	Specific $L_{Aeq\ 30\ min}$ dB
NI1	25.11.16	1540-1610	0	76	79	59	76
	Facility: Plant and trucks on main yard clearly audible almost continuously, with truck idling at 20 m from 1555. **Extraneous**: Distant traffic noise slightly audible, generally masked by site emissions. **Specific $L_{Aeq\ T}$ determination**: LAeq representative.						
NI2	25.11.16	1613-1643	0	69	72	56	69
	Facility: Bale loading operation continuously dominant. **Extraneous**: No offsite noise audible. **Specific $L_{Aeq\ T}$ determination**: LAeq representative.						
NI3	25.11.16	1508-1538	+	54	56	49	<49
	Facility: Plant and trucks in main yard audible at low level, in addition to operations in building. **Extraneous**: Road traffic to NE continuously quite audible, dominating soundscape. Rustling trees on nearby tree continuously audible at low level. **Specific $L_{Aeq\ T}$ determination**: Site noise less than continuous traffic noise, thus <L90.						
NI4	25.11.16	1656-1726	x	68	71	63	<<63
	Facility: No emissions audible. **Extraneous**: Passing road traffic continuously intrusive, masking all sources other than occasional vehicle movements on adjacent access road. **Specific $L_{Aeq\ T}$ determination**: Inaudible, thus <<L90.						

Specific L_{Aeq}: Level considered attributable to source under consideration, determined using real time assessment, field notes, time history profiles, statistical analysis, frequency spectra, spectral statistics and near field correction if applicable.
Audibility scale: Inaudible; faintly audible; slightly audible; audible at low level; quite audible; clearly audible; dominant; intrusive; excessive.

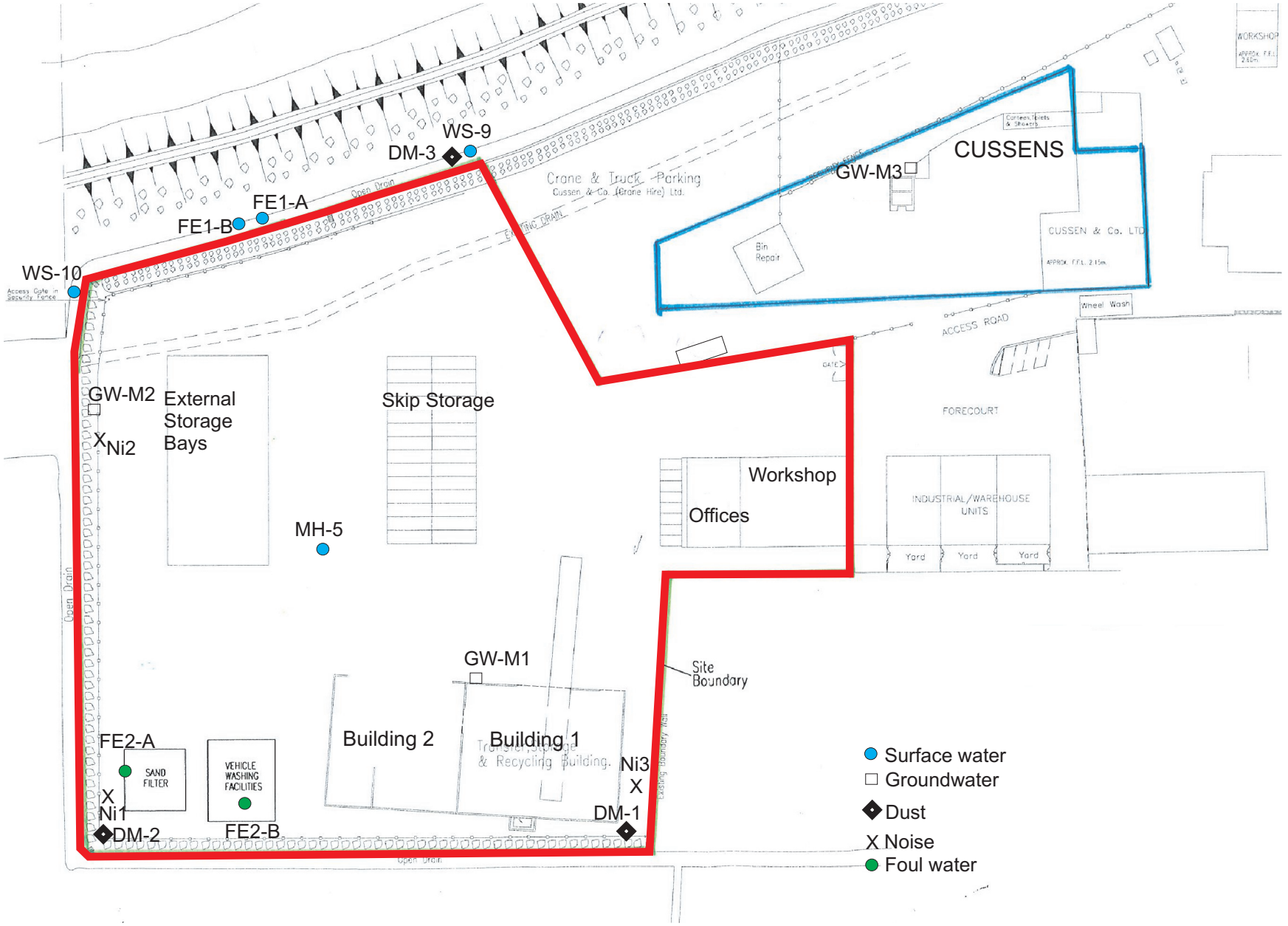
3.5 Dust Monitoring

The revised Licence requires dust monitoring to be carried out quarterly at four monitoring locations, D1, D2, D3 and D4. No samples were taken in Q3 due to a changeover in personnel at the installation. The results of the monitoring are included on Table 3.14.

The dust emission limit (350 mg/m^2/day) was not exceeded at any monitoring location during the monitoring period.

Table 3.14 Dust Monitoring Results 2016

Dust Emission (mg/m^2/day)	**February**	**June**	**December**	**Emission Limit**
Sample Location	**30 Days**	**30 Days**	**30 Days**	**(mg/m^2/day)**
D1	28.95	35.06	2.64	350
D2	40.95	28.84	17.39	350
D3	58.40	57.39	73.49	350
D4	25.19	120.00	4.82	350



O' Callaghan Moran & Associates.
Granary House, Rutland Street,
Cork Ireland.
Tel. (021) 4321521 Fax. (021) 4321522
email : info@ocallaghanmoran.com

CLIENT
Greenstar Environmental ServicesLtd.

TITLE
Monitoring Locations
Limerick W0082-02

FIGURE NUMBER
3.1

Scale
Not To Scale

Revision
A

4. SITE DEVELOPMENT WORKS

4.1 Specified Engineering Works (SEW)

No Specified Engineering Works were completed during 2016. It is proposed to carry out major works on the drainage infrastructure following approval to connect to Bunlicky Wastewater Treatment Plant in 2017.

4.2 Summary of Resource & Energy Consumption

Table 4.1 presents an estimate of the resources used on-site during the reporting period and for comparative purposes the volumes for 2013, 2014 and 2015.

Table 4.1 Estimate of Resources Used On-Site 2013, 2014, 2015 and 2016

Resources	2013	2014	2015	2016
Diesel (green)	69,608 litres	82,432 litres	85,700 litres	124,907 litres
Electricity	126,266 kwh	298,451 kwh	325,376 kWh	336,495 kWh
Hydraulic Oil	4,500 litres	3,000 Litres	3,000 litres	3,500 litres
Engine Oil	1,000 litres	1,000 Litres	600 litres	800 litres
Mains Water	11,873 m^3	12,178m^3	5,972 m^3	6,034 m^3

4.3 Bund Integrity & Pipeline Testing

The Licence was renewed on the 15th May 2015 and condition 6.8 states that the integrity testing of all underground pipelines and tanks must be carried out within six months of date of grant of the Licence and every 3 years thereafter. Bund integrity testing was carried out in September 2015 and all bunds were passed fit for purpose. Testing will be carried out again in 2018. The reports are retained at the installation for Agency inspection.

Pipeline integrity testing was carried out in May 2016 by McBreen Environmental. Records are available on site for inspection.

5. WASTE RECEIVED AND CONSIGNED FROM THE FACILITY

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

The total quantity of waste received was 99,515.67 tonnes. The total waste consigned was 99,397.822 tonnes. The difference remained onsite at the end of 2016 pending removal offsite in 2017. For comparative purposes the amounts of waste received and consigned from 2008 to 2015 are presented in Tables 5.2 and 5.3.

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

Table 5.1 Waste Received & Consigned 2016

EWC	Description	Waste In	Waste Out
05 034	Liquid Sludge	1.2	
15 01 01	Paper & cardboard packaging	6038.724	6700.77
15 01 02	Plastic packaging	424.14	374.84
15 01 03	Wooden packaging	3.84	79.42
15 01 05	Composite Packaging	7.382	
15 01 06	Mixed packaging	6.32	
15 01 07	Glass Packaging	284.85	991.66
17 01 07	Mixture of concrete, bricks, tiles and ceramics	5.98	2341.06
17 02 03	Plastic	1.84	
17 08 02	Gypsum-based construction materials	1.14	
17 09 04	Mixed construction and demolition wastes	2204.094	52.56
18 01 04	Wastes whose collection and disposal is not subject to special requirements in order to prevent infection	31.27	
19 09 02	Liquid Sludge	13.74	
19 12 07	Wood	1.7	2005.82
19 12 09	Minerals	90.48	
19 12 10	Compost	7.44	659.44
19 12 12	Other wastes	49.46	14772.491
20 01 01	Paper & cardboard	1077.298	851.95
20 01 02	Glass	1074.534	260.72
20 01 08	Biodegradable kitchen and canteen waste	5249.091	4795.31
20 01 35	Discarded electrical and electronic equipment	12.66	
20 01 38	Wood	2025.759	126.84
20 01 39	Plastics	313.99	13.56
20 01 40	Metals	118.13	384.74
20 02 01	Biodegradable waste	47.72	149.72
20 03 01	Mixed municipal waste	72397.368	53702.201
20 03 03	Street-cleaning residues	1571.382	1538.66
20 03 06	Sewage residues		27.46
20 03 07	Bulky waste	6454.138	9568.60
	Total Received	**99,515.67**	
	Total Consigned		**99,397.822**
	Disposal		**4,460.48**
	Recovery		**94,937.342**
	Recovery Rate		**95.51%**

Table 5.2 Waste Received & Consigned 2015

EWC	Description	Waste In	Waste Out
02 07 04	Powder	5.18	
15 01 01	Paper & cardboard packaging	5,638.745	5,970.54
15 01 02	Plastic packaging	287.94	399.065
15 01 03	Wooden packaging	10.52	87.98
15 01 05	Composite Packaging	0.92	
15 01 06	Mixed packaging	1,593.54	680.58
15 01 07	Glass Packaging	164.31	205.04
16 06 01	Lead Batteries		0.14
17 01 07	Mixture of concrete, bricks, tiles and ceramics		2,128.39
17 02 03	Plastic	14.96	
17 05 04	Soil & stones		
17 08 02	Gypsum-based construction materials	0.10	
17 09 04	Mixed construction and demolition wastes	2,133.47	96.54
18 01 04	Wastes whose collection and disposal is not subject to special requirements in order to prevent infection	37.16	
19 05 02	Non-composted fraction of animal and vegetable waste	8.85	
19 12 07	Wood	3.64	474.56
19 12 09	Minerals	173.32	
19 12 12	Other wastes	115.44	1,224.78
20 01 01	Paper & cardboard	1,001.76	799.25
20 01 02	Glass	403.86	292.46
20 01 08	Biodegradable kitchen and canteen waste	4,675.44	4,279.582
20 01 35	Discarded electrical and electronic equipment	4.38	
20 01 38	Wood	1,540.54	905.36
20 01 39	Plastics	332.86	
20 01 40	Metals	347.162	486.62
20 02 01	Biodegradable waste	139.43	216.38
20 03 01	Mixed municipal waste	63,809.90	59,980.416
20 03 03	Street-cleaning residues	1,586.18	1,714.58
20 03 07	Bulky waste	4,956.297	9,613.53
	Total Received	**88,985.904**	
	Total Consigned		**89,555.793**
	Disposal		**9,037.98**
	Recovery		**80,517.813**
	Recovery Rate		**89.91%**

Table 5.3 Waste Received & Consigned

	2015	2014	2013	2012	2011	2010	2009	2008
Total Received	88,986	99,646	87,928	55,992	32,550	34,835	42,536	58,203
Total Consigned	89,856	98,699	88,345	55,430	33,335	34,476	41,547	58,654

6. ENVIRONMENTAL INCIDENTS AND COMPLAINTS

6.1 Incidents

The trigger level for surface water for BOD and the revised trigger level for Total Ammonia were exceeded during every monthly and weekly monitoring event in 2016. The trigger level for Total Suspended Solids was exceeded in January, June and August 2016.

Throughout the year there were exceedances of the performance standards for foul water for BOD (8 occasions), TSS (10 occasions) and Ammoniacal Nitrogen (4 occasions).

All exceedances were reported to the Agency and where relevant, to Limerick City & County Council and the Fisheries Board.

6.2 Register of Complaints

SEHL maintains a register of complaints received in accordance with Condition 10.4 of the Licence. No complaints were received during the reporting period.

7. ENVIRONMENTAL DEVELOPMENT & CONTROL

7.1 Environmental Management Programme Report

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

The IMS has been developed for the achievement of continual improvement taking into account the requirements of the Waste Licence Conditions. SEHL has prepared and effectively implemented documented procedures and instructions in accordance with the requirements of both the OHSAS 18001:2007 and ISO 14001:2004. A successful ISO re-certification audit was completed at the facility in December 2015. The installation is accredited to both standards.

The schedule of Objectives and Targets, including their status for 2016 (Table 7.1), as well as the proposed Objectives and Targets for 2017 (Table 7.2) are presented below. An index of procedures used at the installation is included in Appendix 2.

7.1.1 Site Management Structure

Management and Staffing structure: -

Name: Robert Waters,

Responsibility: Yard Manager

Experience: 10 years experience waste management experience; Completed the CIWM accredited training course in Managing Waste and Waste Licence Compliance.

Name: Philip O'Sullivan

Responsibility: Yard Supervisor

Experience: 7 years waste management experience; Completed the CIWM accredited Waste Management and compliance course.

7.1.2 Staff Training

No staff training was carried out in 2016. Staff training is carried out as necessary and details are maintained at the installation office.

7.2 Environmental Management Programme

7.2.1 Schedule of Objectives 2016

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

7.2.2 Schedule of Objectives 2017

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

7.3 Communications Programme

SEHL is committed to setting the standard in waste management and ensuring environmental compliance in all operations. In addition, SEHL's Environmental, Health & Safety Policy makes a specific commitment to ensure that this policy and environmental records are available to the public and interested parties.

To this end SEHL has drawn up a Communications Programme, which details how members of the public are facilitated in accessing and viewing environmental information at the installation. Members of the public who wish to inspect these files may do so at any reasonable time by making an appointment with the Operations Manager using the telephone number posted on the main installation entrance sign.

7.4 Report Financial Provision

A Decommissioning Management Plan (DMP) and Environmental Liabilities Risk Assessment (ELRA) including Financial Provision (FP) were submitted to the Agency in 2013 as part of the transfer of the licence which occurred in Q1 2014. Both the DMP and ELRA have been approved by the Agency and provision is in place with agreement of the Agency. A review of both reports will take place in 2017.

Table 7.1 Objectives and Targets for 2016

No	Objective	Target	Timescale	Responsibility	Status
1	**Increase awareness of Odour Management on site group wide**	Specify Odour detection in Site Inspection Database (EF-10A) on a daily basis and generate actions as appropriate	Q1-Q2	Site Management/ EHS	Completed
2	**Waste storage practices**	Review waste storage practices on each site to ensure that they are in line with licence conditions, fire prevention and insurance recommendations	Q2	Site Management/ EHS	Ongoing
3	**Emergency response procedures - ER pack update**	Review the Emergency Response Pack on each site and ensure that all information & equipment required in case of an emergency is available. Confirm that relevant staff training adequately addresses.	Q2	Site Management/ EHS	Ongoing
4	**CRAMP, ELRA & Financial Provision**	CRAMP, ELRA & Financial Provision to be reviewed	Q2/Q3	EHS team	2017
5	**Waste acceptance, classification & records**	EWC training for all weighbridge ops. Centralisation of all licences & permits inc NWCPs for hauliers.	Q2/Q3	EHS team	Ongoing
6	**Pipeline integrity & bund testing**	Arrange for integrity testing of pipelines and bunds as per licence requirements.	Q2/Q3	Site Management/ EHS	Completed
7	**Energy Audit**	Completed energy audit as per amended licence conditions	Q4	Site Management/ EHS	Completed
8	**Connect the waste water emissions to the Local Authority WWTP**	Progress the proposed connection of the foul water to the municipal WWTP	Q2 – Q3	Site Management / EHS	On-going
9	**Decommission Klargester**	Decommission the onsite Klargester WWTP following connection to the municipal sewer.	Subject to Council Agreement	EHS	On-going
10	**Occupational Noise Survey**	Completion of Occupational Noise Survey	Q1/Q2	EHS	Completed

Table 7.2 Schedule of Objective and Targets 2017

No	Objective	Target	Timescale	Responsibility
1	**Odour management**	Ensure odour management plans are followed and potential new sources of odour are identified	Q1 - Q4	Site management
2	**Fire prevention**	Implement recs from Fire Risk Assessments Update ERP & APP Maintain fire detection equipment	Q1 - Q4	Site management/EHS team
3	**Waste storage**	Review waste storage practices on each site to ensure that they are inline with licence conditions, fire prevention and insurance recommendations	Q1 - Q4	Site management/EHS team
4	**Waste acceptance, classification & records**	EWC training for all weighbridge ops. Centralisation of all licences & permits inc NWCPs for hauliers.	Q1 - Q4	EHS team
5	**CRAMP, ELRA & Financial Provision**	CRAMP, ELRA & Financial Provision to be reviewed	Q2	EHS team
6	**Lighting in MRF buildings**	Clean & upgrade where required all light fittings in MRF buildings	Q3	Site management
7	**NWCP exemptions**	Implement NWCP exemption declarations	Q1 - Q4	Site management
8	**WWTP connection**	Progress WWTP connection w/ Irish Water	Q1-Q4	EHS team
9	**Tankering of SW & Wastewater**	Continue tankering SW & Wastewater in advance of WWTP connection	Q1-Q4	Site management
10	**Monitoring points**	Maintain clear access to all monitoring points	Q1-Q4	Site management
11	**Replace wind sock**	Replace the wind sock at the installationof 27	Q2	Site management

7.5 Nuisance Controls

SEHL has contracted a vermin control company to carry out nuisance control at the installation. Rentokil Initial Ltd provides and maintains forty bait boxes at the installation and also carries out insect control measures as required. Weekly nuisance and litter inspections are carried out and litter picks are carried out daily.

8. OTHER REPORTS

8.1 European Pollutant Release and Transfer Register Regulation

Under the European Pollutant Release and Transfer Register Regulation (EC) No. 166/2006 SEHL are required to submit information annually to the Agency. A copy of the information submitted to the Agency via the web-based data reporting system is included in Appendix 1.

APPENDIX 1

European Pollutant Release and Transfer Register

| PRTR# : W0082 | Facility Name : Starrus Eco Holdings Limited (Dock Road) | Filename : W0082_2016.xls | Return Year : 2016 |

Guidance to completing the PRTR workbook

PRTR Returns Workbook

Version 1.1.19

REFERENCE YEAR	2016

1. FACILITY IDENTIFICATION

Parent Company Name	Starrus Eco Holdings Limited
Facility Name	Starrus Eco Holdings Limited (Dock Road)
PRTR Identification Number	W0082
Licence Number	W0082-03

Classes of Activity

No.	class_name
-	Refer to PRTR class activities below

Address 1	Ballykeefe Townland
Address 2	Waste Management Section
Address 3	Dock Road
Address 4	Limerick
	Limerick
Country	Ireland
Coordinates of Location	-8.66662 52.651
River Basin District	IEGBNISH
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	Sara Smyth
AER Returns Contact Email Address	sara.smyth@greenstar.ie
AER Returns Contact Position	Environmental Engineer
AER Returns Contact Telephone Number	01 2746236
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	01 2829525
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	16
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

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

4.1 RELEASES TO AIR

Link to previous years emissions data

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

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

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

SECTION B : REMAINING PRTR POLLUTANTS

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

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

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

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

* 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 (Dock Road)

Please enter summary data on the quantities of methane flared and / or utilised	T (Total) kg/Year	M/C/E	Method Used: Method Code	Method Used: Designation or Description	Facility Total Capacity m3 per hour	
Total estimated methane generation (as per site model)	0.0				N/A	
Methane flared	0.0				0.0	(Total Flaring Capacity)
Methane utilised in engine/s	0.0				0.0	(Total Utilising Capacity)
Net methane emission (as reported in Section A above)	0.0				N/A	

4.2 RELEASES TO WATERS

Link to previous years emissions data

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

Data on ambient monitoring of storm/surface water or groundwater, conducted as part of your licence requirements, should NOT be submitted under AER / PRTR Reporting as t

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

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

SECTION B : REMAINING PRTR POLLUTANTS

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

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

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

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

* 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

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			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

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

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

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

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

4.4 RELEASES TO LAND

Link to previous years emissions data

SECTION A : PRTR POLLUTANTS

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

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

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

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

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	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	15 01 01	No	1748.56	paper and cardboard packaging	R13	M	Weighed	Offsite in Ireland	Agnail Ltd,TFS Broker IRE/AG117/11	Ballymacken Industrial Estate,Ballymacken,Portlaoise,Co. Laois,Ireland		
Within the Country	15 01 01	No	611.42	paper and cardboard packaging	R13	M	Weighed	Offsite in Ireland	Nurendale Ltd.,W0140-04	Rathdrinagh,Beauparc,Navan,Co. Meath,Ireland		
Within the Country	15 01 01	No	25.58	paper and cardboard packaging	R13	M	Weighed	Offsite in Ireland	Irish Packaging Recycling,W0263-01	Ballymount Road,Walkinstown,Dublin 12,.,Ireland		
To Other Countries	15 01 01	No	4315.21	paper and cardboard packaging	R13	M	Weighed	Abroad	Saica Natur UK Limited,IRE/G277/15	144 Manchester Road,Carrington,Manchester,M31 4QN,United Kingdom		
To Other Countries	15 01 02	No	70.7	plastic packaging	R13	M	Weighed	Abroad	Peute Recycling,TFS Broker IRE/G006/11	.,.,.,.,Ireland		
To Other Countries	15 01 02	No	65.68	plastic packaging	R3	M	Weighed	Abroad	WRC Recycling,IRE/AG121/15	Floors St.,Johnstown,Renfrewshire,PA5 8QS,United Kingdom		
Within the Country	15 01 02	No	13.54	plastic packaging	R13	M	Weighed	Offsite in Ireland	Irish Packaging Recycling,W0263-01	Ballymount Road,Walkinstown,Dublin 12,.,Ireland		
Within the Country	15 01 02	No	25.56	plastic packaging	R13	M	Weighed	Offsite in Ireland	Agnail Ltd,TFS Broker IRE/AG117/11	Ballymacken Industrial Estate,Ballymacken,Portlaoise,Co. Laois,Ireland		
Within the Country	15 01 02	No	199.36	plastic packaging	R13	M	Weighed	Offsite in Ireland	Leinster Environmental,WFP-LH-09-0004-01	Dundalk,.,.,Louth,Ireland		
Within the Country	15 01 03	No	79.42	wooden packaging	R3	M	Weighed	Offsite in Ireland	Quitman O neill Packaging LTD,.	.,.,Galway,.,Ireland		
Within the Country	15 01 07	No	991.66	glass packaging	R5	M	Weighed	Offsite in Ireland	Mr Binman,W0061-03	Luddenmore ,Grange ,Kilmallock ,Co Limerick,Ireland		
Within the Country	17 01 07	No	2341.06	mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	R5	M	Weighed	Offsite in Ireland	Joseph Collins,COR-CE-14-0003-01	6 Rock Spring Gardens,Ennis Road,Limerick,.,Ireland		
Within the Country	17 09 04	No	52.56	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	R5	M	Weighed	Offsite in Ireland	Joseph Collins,COR-CE-14-0003-01	6 Rock Spring Gardens,Ennis Road,Limerick,.,Ireland		
Within the Country	19 12 07	No	2005.82	wood other than that mentioned in 19 12 06	R13	M	Weighed	Offsite in Ireland	Clonmel Waste Disposal Ltd,WP-008-02	Lawlesstown,Clonmel,.,Co Tipperary,ireland		
Within the Country	19 12 12	No	666.54	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	Starrus Eco Holdings Ltd.,W0136-03	Sarsfield Court Industrial Estate,Glanmire,Co. Cork,.,Ireland		
Within the Country	19 12 12	No	120.86	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	Starrus Eco Holdings Ltd.,W0053-03	.,Fassaroe,Bray,Co. Wicklow,Ireland		
Within the Country	20 01 01	No	138.39	paper and cardboard	R3	M	Weighed	Offsite in Ireland	Agnail Ltd,TFS Broker IRE/AG117/11	Ballymacken Industrial Estate,Ballymacken,Portlaoise,Co. Laois,Ireland		
Within the Country	20 01 01	No	129.06	paper and cardboard	R3	M	Weighed	Offsite in Ireland	Shred It Ireland,.	.,.,.,.,Ireland		
Within the Country	20 01 01	No	102.02	paper and cardboard	R3	M	Weighed	Offsite in Ireland	Peute Recycling,TFS Broker IRE/G006/11	.,.,.,.,Ireland		
To Other Countries	20 01 01	No	201.0	paper and cardboard	R3	M	Weighed	Abroad	Northwood Recycling Ltd,IRE/G282/15	Waterside Disley,Stockport,Cheshire,SK12 2HW,United Kingdom		
Within the Country	20 01 01	No	281.48	paper and cardboard	R3	M	Weighed	Offsite in Ireland	Irish Packaging Recycling,W0263-01	Ballymount Road,Walkinstown,Dublin 12,.,Ireland		

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	20 01 02	No	260.72	glass	R5	M	Weighed	Offsite in Ireland	Mr Binman,W0061-03	Luddenmore ,Grange ,Kilmallock ,Co Limerick,Ireland		
Within the Country	20 01 08	No	12.26	biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	Clonmel Waste Disposal Ltd,WP-008-02	Lawlesstown,Clonmel,.,Co Tipperary,ireland		
Within the Country	20 01 38	No	126.84	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	384.74	metals	R4	M	Weighed	Offsite in Ireland	Clearcircle metals (Limerick),WFP-LKC-11-001-01	Ballysimon Road,Limerck,.,.,Ireland		
Within the Country	20 02 01	No	7.64	biodegradable waste	R3	M	Weighed	Offsite in Ireland	Clonmel Waste Disposal Ltd,WP-008-02	Lawlesstown,Clonmel,.,Co Tipperary,ireland		
Within the Country	20 03 01	No	30.92	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Barna Waste,W0106-02	.,Carrowbrowne,Headford Road,Galway,Ireland		
Within the Country	20 03 01	No	12.82	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Irish Packaging Recycling,W0263-01	Ballymount Road,Walkinstown,Dublin 12,.,Ireland		
Within the Country	20 03 01	No	11302.83	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Dillon Waste,WFP-KY-10-001	The kerries,Tralee,Kerry,.,Ireland		
Within the Country	20 03 01	No	21.22	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	685.84	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Knockharley Landfill Ltd,W0146-03	Kenstown ,Navan ,Co Meath , ,Ireland		
To Other Countries	20 03 01	No	20524.05	mixed municipal waste	R13	M	Weighed	Abroad	Attero BV,670283	Vamweg 7 ,9418 TM Wijster , , ,Netherlands		
Within the Country	20 03 01	No	1718.44	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Starrus Eco Holdings Ltd.,W0053-03	.,Fassaroe,Bray,Co. Wicklow,Ireland		
Within the Country	20 03 01	No	26.6	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Starrus Eco Holdings Ltd.,W0136-03	Sarsfield Court Industrial Estate,Glanmire,Co. Cork,.,Ireland		
Within the Country	20 03 01	No	15.16	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Clonmel Waste Disposal Ltd,WP-008-02	Lawlesstown,Clonmel,.,Co Tipperary,ireland		
Within the Country	20 03 01	No	491.86	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Dublin City Council,W0238-01	Merrywell Industrial Estate,Ballymount Road Lower,Ballymount ,Dublin 12,Ireland		
To Other Countries	20 03 01	No	1936.539	mixed municipal waste	R13	M	Weighed	Abroad	EEW Energy from Waste Delfzijl B.V.,2098589	Oosterhorn 38,NL-9936,HD Farmsum,. ,Netherlands		
Within the Country	20 03 01	No	278.48	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Bord na Mona,W0201-03	Drehid,Carbury,Kildare,.,Ireland		
To Other Countries	20 03 01	No	16657.442	mixed municipal waste	R13	M	Weighed	Abroad	E.ON Varme Sverige AB Handeloverke,556146-1814	Energigatan5,SE-601,71 Norrkoping,.,Sweden		
Within the Country	20 03 03	No	107.1	street-cleaning residues	D5	M	Weighed	Offsite in Ireland	Bord na Mona,W0201-03	.,.,.,.,Ireland		
Within the Country	20 03 03	No	441.56	street-cleaning residues	D5	M	Weighed	Offsite in Ireland	Knockharley Landfill Ltd,W0146-03	Kenstown ,Navan ,Co Meath , ,Ireland		
Within the Country	20 03 03	No	990.0	street-cleaning residues	R13	M	Weighed	Offsite in Ireland	Starrus Eco Holdings Ltd.,W0053-03	.,Fassaroe,Bray,Co. Wicklow,Ireland		
Within the Country	20 03 07	No	2926.28	bulky waste	D5	M	Weighed	Offsite in Ireland	Bord na Mona,W0201-03	.,.,.,.,Ireland		
Within the Country	20 03 07	No	6642.32	bulky waste	R13	M	Weighed	Offsite in Ireland	Starrus Eco Holdings Ltd.,W0053-03	.,Fassaroe,Bray,Co. Wicklow,Ireland		
Within the Country	19 12 12	No	304.12	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	Starrus Eco Holdings Ltd.,W0058-01	Deep Water Quay,Sligo,.,.,Ireland		
To Other Countries	19 12 12	No	3015.2	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R13	M	Weighed	Abroad	E.ON Varme Sverige AB Handeloverke,556146-1814	Energigatan5,SE-601,71 Norrkoping,.,Sweden		

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	19 12 12	No	1617.701	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	McGill Environmental Systems,W180-01	Coom,Glenville,Co. Cork,.,Ireland		
Within the Country	20 03 06	No	27.46	waste from sewage cleaning	R13	M	Weighed	Offsite in Ireland	McBreen Environmental Ltd,WFP-CN-16-0001-01	Lismagratty,Cavan,Co. Cavan,.,Ireland		
Within the Country	19 12 10	No	638.42	combustible waste (refuse derived fuel)	R13	M	Weighed	Offsite in Ireland	Nurendale Ltd.,W0140-04	Rathdrinagh,Beauparc,Navan,Co. Meath,Ireland		
To Other Countries	19 12 10	No	21.02	combustible waste (refuse derived fuel)	R13	M	Weighed	Abroad	Indaver,556146-1814	E.ON Varme Sverge AB,Energigatan 5,SE-601 71 Norrkoping,.,Sweden		
Within the Country	19 12 12	No	1772.18	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	McGill Environmental Systems,W180-01	Coom,Glenville,Co. Cork,.,Ireland		
Within the Country	19 12 12	No	40.6	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	Nurendale Ltd.,W0140-04	Rathdrinagh,Beauparc,Navan,Co. Meath,Ireland		
Within the Country	20 01 08	No	4377.59	biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	Ormonde Organics,W0287-01	Killowen,Portlaw,Co. Waterford,.,Ireland		
Within the Country	20 01 39	No	13.56	plastics	R13	M	Weighed	Offsite in Ireland	Agnail Ltd,TFS Broker IRE/AG117/11	Ballymacken Industrial Estate,Ballymacken,Portlaoise,Co. Laois,Ireland		
Within the Country	20 02 01	No	119.78	biodegradable waste	R3	M	Weighed	Offsite in Ireland	Ormonde Organics,W0287-01	Killowen,Portlaw,Co. Waterford,.,Ireland		
To Other Countries	19 12 12	No	7235.29	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R13	M	Weighed	Abroad	AEB Exploitatie BV,NH519789VIHB	Australiehavenweg 21,Westpoortnumer ,5541 1045 ,BA Amsterdam,Netherlands		
Within the Country	20 01 08	No	405.46	biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	Acorn Recycling Limited,W0249-01	Ballybeg,Littleton,Co. Tipperary,.,Ireland		
Within the Country	20 02 01	No	22.3	biodegradable waste	R3	M	Weighed	Offsite in Ireland	Acorn Recycling Limited,W0249-01	Ballybeg,Littleton,Co. Tipperary,.,Ireland		

* Select a row by double-clicking the Description of Waste then click the delete button

APPENDIX 2

Procedures List

Integrated Procedures - IP		
IP-01	Document & Record Control Procedure	Rev 01, 28/04/14
IP-02	Health & Safety Risk Assessment Procedure	Rev 01, 28/04/14
IP-03	Environmental Aspects & Impacts Procedure	Rev 01, 28/04/14
IP-04	Legal & Regulatory Requirements Procedure	Rev 01, 28/04/14
IP-05	Objectives, Targets & Management Programmes Procedure	Rev 02, 21/01/16
IP-06	Competence, Training & Awareness Procedure	Rev 01, 28/04/14
IP-07	Communication & Consultation Procedure	Rev 02, 21/01/16
IP-08	Monitoring, Measurement & Improvement Procedure	Rev 01, 28/04/14
IP-09	Evaluation of Compliance Procedure	Rev 01, 28/04/14
IP-10	Non Conformances, Corrective/Preventive Actions Procedure	Rev 01, 28/04/14
IP-11	Internal Audit Procedure	Rev 01, 28/04/14
IP-12	Management Review Procedure	Rev 02, 21/01/16
IP-13	Control of Contractors/Visitors Procedure	Rev 01, 28/04/14
IP-14	Health & Safety & Environmental Monitoring	Rev 01, 28/04/14
IP-15	Emergency Preparedness & Response Procedure	Rev 01, 28/04/14
IP-16	Fire Prevention Procedure	Rev 01, 28/04/14
IP-17	Bin Washing Procedure	Rev 01, 28/04/14
IP-18	Accident Prevention Procedure	Rev 02, 14/11/16
IP-19	Fuel Procedure for Tanks & Mobile Plant	Rev 01, 11/01/17

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

Environmental Procedures - EP		
EP-01	Office Waste & Energy Management Procedure	Rev 01, 28/04/14
EP-02	Decommissioning and Aftercare Procedure	Rev 01, 28/04/14
EP-03	Environment Communications Procedure	Rev 01, 28/04/14
EP-04	Waste Permits & Licences Procedure	Rev 01, 28/04/14
EP-05	Waste Acceptance Procedure	Rev 01, 28/04/14
EP-06	Unacceptable Waste Procedure	Rev 01, 28/04/14
EP-07	Waste & Material Storage Procedure	Rev 01, 28/04/14
EP-08	Waste Processing Procedure	Rev 01, 28/04/14
EP-09	Site Infrastructure Procedure	Rev 02, 06/05/15
EP-10	Nuisance Management Procedure (Site Specific)	(Site Specific) Rev 01, 28/04/14
EP-11	Civic Amenity Site Procedure	Rev 01, 28/04/14

Amendment History

Date	Amendment No.	Procedure No:	Revision No:	Comment	Authorised By
05.07.10	01	All	01	Initial Issue	M.D & O.C
13.09.10	02	EP-03	02	Issue of Incident Reports	M.D
20.09.10	03	IP-10	02	Env issues not logged on WIMS Database	M.D
29.10.10	04	IP-13	02	Use of M&M equipment by contractors	M.D & O.C
29.10.10	05	IP-14	02	Use of M&M equipment by contractors	M.D & O.C
29.10.10	06	SP-02	02	Inclusion of Maintenance Schedule	M.D & O.C
05.11.10	07	IP-04	02	Inclusion of other requirements	S.B & O.C
01.02.11	08	SP-08	01	Inclusion of new procedure	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

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

Circulation List

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

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3	Greenstar Intranet – Electronic Copy