

Annual Environmental Report 2017



**Clean (Irl) Refuse and Recycling Co.
T/A Clean Ireland Recycling
Ballinagun West
Cree
Co. Clare**

Grid Ref: R027660 R02702 66004

W0253-01

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1.0 Introduction

This is the 2017 Annual Environmental Report prepared for Clean Ireland Recycling's EPA waste licenced facility in Ballinagun West, Cree, Co.Clare. This report covers the period from the 1st January 2017 to the 31st of December 2017. This report has been prepared with reference to the EPA AER draft guidance document V3.0 Dec13. The contents of this report are as required in Schedule F of W0253-01:

SCHEDULE F: Annual Environmental Report

Annual Environmental Report Content ^{Note 1}
<p>Reporting Period.</p> <p>Waste activities carried out at the facility.</p> <p>Quantity and composition of waste recovered, received and disposed of during the reporting period and each previous year (relevant EWC codes to be used).</p> <p>Waste recovery report.</p> <p>Full title and a written summary of any procedures developed by the licensee in the year which relates to the facility operation.</p> <p>Emissions from the facility.</p> <p>Waste management record.</p> <p>Resource consumption summary.</p> <p>Energy and heat generation summary.</p> <p>Use of biogas flare and biogas venting summary.</p> <p>Complaints summary.</p> <p>Schedule of Environmental Objectives and Targets.</p> <p>Environmental management programme – report for previous year.</p> <p>Environmental management programme – proposal for current year.</p> <p>Pollutant Release and Transfer Register – report for previous year.</p> <p>Pollutant Release and transfer Register – proposal for current year.</p> <p>Noise monitoring report summary.</p> <p>Ambient monitoring summary.</p> <p>Tank and pipeline testing and inspection report.</p> <p>Reported incidents summary.</p> <p>Energy efficiency audit report summary.</p> <p>Report on the assessment of the efficiency of use of raw materials in processes and the reduction in waste generated.</p> <p>Report on progress made and proposals being developed to minimise water demand and the volume of trade effluent discharges.</p> <p>Development/Infrastructural works summary (completed in previous year or prepared for current year).</p> <p>Reports on financial provision made under this licence, management and staffing structure of the facility, and a programme for public information.</p> <p>Closure, restoration & aftercare management Plan.</p> <p>Statement of measures in relation to prevention of environmental damage and remedial actions (Environmental Liabilities).</p> <p>Environmental Liabilities Risk Assessment Review (every three years or more frequently as dictated by relevant on-site change including financial provisions).</p> <p>Achievement of compost quality standards.</p> <p>Destination and uses of compost produced.</p> <p>Any other items specified by the Agency.</p>

Note 1: Content may be revised subject to the agreement of the Agency.

2.0 Waste Activities 2017

Operations at the facility include the receipt of domestic, commercial, industrial and construction waste, which is sorted and segregated for onward recycling / recovery in accordance with the recycling potential. Waste deemed unsuitable for recycling / recovery is segregated and compacted for disposal off-site.

The main waste types processed at the facility include:

- Mixed residual waste (including compostable waste)
- Dry recyclables (including segregated recyclables)
- Construction and Demolition (C&D) Waste
- Timber waste

The main waste activities on site include:

- Mechanical treatment of mixed recyclable waste
- Mechanical treatment and baling of mixed residual waste
- Mechanical treatment of C&D waste

The facility processes non-hazardous waste only.

Details of the quantities and types of waste accepted onsite in 2017 are included in Appendix A. Details of the quantities and types of waste dispatched from site in 2017 are included in Appendix D as part of the PRTR.

2.1 Waste Recovery Report

Clean Ireland Recycling's facility in Cree makes a significant contribution to the achievement of waste recovery objectives and National and European waste recovery policies. As per condition 11.14 details of the tonnage of metals, C&D waste, biowaste, organic fines and other recyclables are included in the PRTR in Appendix D.

2.1.1 Recovery of Metals

Clean Ireland Recycling provides for the collection of source segregated metals primarily from construction sites and metal packaging from civic amenity sites. Source segregated metals are kept separate from other wastes to ensure maximum recycling potential. Metals are recovered mechanically from mixed C&D and bulky waste skips. Metals are also removed from the residual waste by means of a magnet prior to baling of the waste. All metals are bulked for transport to authorised facilities for further processing.

2.1.2 Recovery of C&D derived waste material

Clean Ireland Recycling provides for the collection of source segregated C&D waste primarily from construction sites. Source segregated C&D waste is kept separate from other wastes to ensure maximum recycling potential. C&D waste streams are also recovered mechanically from mixed C&D skip waste and bulky waste skips. Timber, metals, gypsum and other recyclables are separated from C&D waste for recycling. Mixed C&D waste is separated into separate fractions using a trommel, magnet, picking line, wind shifter etc. C&D fines are dispatched from site for use as landfill cover. Other fractions are bulked onsite prior to being dispatched from site to suitably authorised facilities for further recycling.

2.1.3 Biowaste and Organic fines

Food waste is collected as a source segregated fraction from domestic and commercial customers. The majority of this waste is bulked for transfer through Clean Ireland Recycling's Waste Permitted Facility in Shannon with smaller quantities transferred through the Cree facility. Clean Ireland Recycling encourages all customers to avail of the kerbside food waste collection. Food bins are actively monitored for contamination. Clean Ireland Recycling operates a pricing structure which encourages the source segregation of food waste. All food waste is kept separate and dispatched to authorised anaerobic digestion or composting facilities for further treatment and recovery. Using a mobile trommel, organic fines were removed from the residual waste received onsite prior to baling for export. This process was implemented to improve the calorific value of the baled residual waste for export under TFS to a waste to energy facility. Organic fines are bulked onsite for transfer to an authorised composting facility where the material is stabilised prior to use as landfill cover.

2.1.4 Other recyclable materials

Other recyclables are accepted/collected and transferred through the Cree facility. Recyclables include cardboard, paper, plastics, mixed dry recyclables, WEEE, cartridges, batteries and fluorescent tubes. Source segregated cardboard, paper and plastics are baled onsite and stored prior to dispatch for further processing/recycling. Mixed dry recyclables are bulked prior to dispatch for further segregation, processing and recycling. Recyclable materials are removed from skip waste where possible for recycling.

2.1.5 ELVs and Biogas

No end-of-life vehicles are currently accepted onsite. The proposed biogas production process has not been developed at the facility.

2.2 Waste Management Record

Waste produced from activities onsite is minimal. It includes source segregated recyclables, food and residual waste from the office and canteen. Leachate from the bale storage shed is collected in a bunded tank and dispatched from site as required to an authorised facility for treatment. Details of the quantities are included in the PRTR in Appendix D.

3.0 Procedures

Procedures relating to the facility operation are maintained as part of the company wide ISO certified EQHS integrated management system.

The following procedures were developed or amended in 2017:

Ref	Date	Title
COP 18	27.01.17	Lock up procedure for Cree
CEP 01	23.11.17	Method for Loading 40 foot containers for Paper and OCC
CEP 02	24.11.17	Emergency Response Procedure
CEP 03	24.11.17	Spill/Clean Up Procedure
CEP 04	24.11.17	Fire and Explosion
CEP 10	24.11.17	Site Management Procedure
CEP 20	01.02.17	Waste Handling
CEP 21	01.02.17	Waste Acceptance Procedure
CEP 24	02.02.17	Bale Temperature Procedure
CSP 22	01.02.17	Cree Induction Procedure
CSP 23	01.02.17	Cree Fire Safety Procedure
CSP 24	01.02.17	Hot Works Procedure
CSP 25	01.02.17	Housekeeping Procedure

4.0 Emissions from the Facility

Details of emissions from the facility are included in the PRTR in Appendix D and monitoring results are included in appendix B.

5.0 Resource Consumption Summary

The following table summarises the resources used onsite in 2017 and 2016.

Resource	Usage 2017	Usage 2016
Electricity	491002kWh	341609kWh
Public Water	236m3	188m3
Well Water	1259m3	1700m3
Woodchip	0t	6 tonnes
White Diesel	10000 litres	15600 litres
Green Diesel	77206 litres	48554 litres
Heating Oil	3,333 litres	n/a

These resources represent the majority of the raw materials used in the operation of the facility. Improvements have been made in the efficiency of the lighting in use onsite to reduce electricity consumption. All vehicles and equipment are maintained regularly on a scheduled basis as part of the integrated management system. This ensures all machinery and plant is operating efficiently. Older machines are replaced with newer more efficient ones as required.

5.1 Report on progress to minimise water demand and volume of trade effluent discharges.

Water demand: There is rain water harvesting for the supply of fire water onsite and water for the toilets.

Trade effluent: Discharges to the Puraflow water treatment unit are dependent on the number of employees/contractors using the canteen and toilet facilities. The generation of leachate from the bale shed has been reduced by the efficient use of water during cleaning and the removal of organic fines from the residual waste prior to baling. Truck washing has been relocated to the Clean Ireland Recycling waste permitted facility/truck depot in Shannon. At this facility wash water can be directed to sewer for treatment. An Irish water discharge licence is in place for the Shannon facility.

6.0 Energy, Heat, Biogas and Compost

6.1 Energy and heat generation summary

There is an oil boiler onsite for the provision of heat for the canteen and offices. No heat or energy is generated from waste.

6.2 Biogas

There is currently no biogas produced onsite. There is no biogas flare or venting in use.

6.3 Compost – Quality Standards and Destinations

No compost is currently being produced onsite. The destinations for organic wastes dispatched from the facility are detailed in the PRTR in Appendix D.

6.4 Energy efficiency audit report summary

A company wide Energy Audit Report was carried out in November 2015 in compliance with European Union's Energy Efficiency Directive, 2012/27/EU and Irish Statutory Instrument S.I. No. 426 of 2014. This included an assessment of the energy usage at the Cree facility and identified opportunities for reductions in energy usage. These recommendations have been taken into account in the management and future development of the facility.

7.0 Pollutant Release and Transfer Register (PRTR)

The PRTR for 2017 has been submitted via the dedicated EPA online portal as required. A copy of the spreadsheet submitted has been included in Appendix D. It is proposed that the quantities will be reduced for 2018 as waste will be transferred through alternative authorised facilities. Tonnages of waste transferred through the facility have increased in 2017 due to increased customer requirements for waste recovery, disposal and recycling.

8.0 Tank and Pipeline testing and inspection report

The following sumps, bunds and tanks have all been tested and passed inspection. Testing is due every three years. The following were tested during August 2017 and all passed:

Concrete Sump - Leachate Sump → 28/08/17 to 29/08/17 **Passed**

Concrete Bund - Leachate Tank Bund → 28/08/17 to 29/08/17 **Passed**

Leachate Tank – Steel leachate tank → 28/08/17 to 29/08/17 **Passed**

The following are due for testing in 2018:

Concrete Bund - Oil Bund - Tested 7/08/15 to 13/08/15

Double skinned plastic - C&D Generator Diesel Tank - inspected 29/09/15

Double skinned plastic - Municipal Waste Shed Diesel Tank - inspected 29/09/15

9.0 Reported Incidents Summary

Incident No.	Incident Nature	Category	Incident Date	Details
INCI013507	Trigger Level Reached	1. Minor	23/11/2017	Exceedance of trigger levels at SW1 & SW2
INCI013247	Trigger Level Reached	1. Minor	25/09/2017	Exceedance of trigger levels at SW1 & SW2
INCI013240	Other	1. Minor	21/08/2017	Exceedance of ELV for Dust
INCI012982	Other	1. Minor	20/06/2017	Exceedance of ELV for GW1
INCI012671	Trigger Level Reached	1. Minor	29/06/2017	Exceedance of trigger levels at SW1
INCI012031	Trigger Level Reached	1. Minor	28/02/2017	Exceedance of trigger levels at SW2
INCI011668	Other	1. Minor	09/02/2017	Exceedance of ELV for GW1

Incidents were reported relating to exceedance of emission limit for pH at GW1. This monitoring point is the sample chamber from the Puraflow waste water treatment unit prior to the polishing filter. This unit is used to treat the waste water from the offices and canteen onsite and is not connected with waste processing activities onsite. It is thought that the low

pH result may be due to a fault with the unit or the use of acidic cleaning products. This is was investigated in 2017 and the situation was resolved. During the summer months there was an exceedance of the emission limit for dust but this was attributed to algal growth in the collection jars. Subsequent dust monitoring showed no exceedance. The other incidents relate to storm water monitoring results which reached trigger levels for ammonia, suspended solids and/or BOD. Investigations have been undertaken to address any contamination of storm water and improvements have been made to waste handling procedures onsite. The trigger levels set for the site are comparatively low and may be revised upwards in the future with the agreement of the EPA.

There were no complaints received in 2017.

10.0 Summary of development/Infrastructural works

In 2017 a roof was installed over the leachate tank and bund to prevent the ingress of rainwater into the bund.

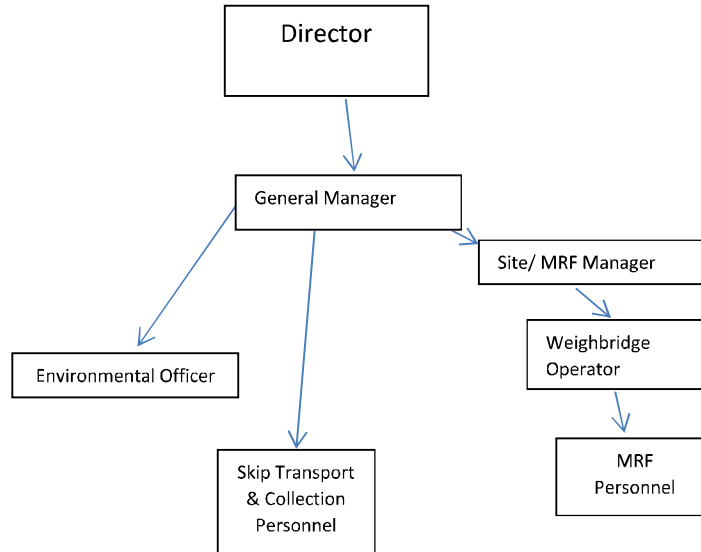
11.0 Financial provision, CRAMP (closure, restoration and aftercare management plan), ELRA (Environmental Liabilities Risk Assessment) and Environmental Liabilities – Statement of Measures

The Closure, restoration and aftercare management plan/decommissioning management plan (DMP) and the ELRA have been submitted and approved. Financial provision has been put in place for both and has been approved by the EPA.

11.1 Statement of measures in relation to the prevention of environmental damage and remedial actions

Possible Risk	Prevention Measures
Fire Fire water	<ul style="list-style-type: none"> • Staff fire training, • Operating procedures • Maintenance schedule • Staff training • Liaison with fire services – good site knowledge • Fire Alarms • Alarm monitoring • Firefighting training • Firefighting equipment • Emergency response procedures • Shut off valves
Water contamination	<ul style="list-style-type: none"> • Regular monitoring • Good housekeeping • Waste processing and storage indoors • Sealed vehicles and containers • Spill kits • Shut off valves
Air contamination	<ul style="list-style-type: none"> • Good housekeeping • Waste processing and storage indoors • Odour abatement system • Dust suppression if required
Malicious damage	<ul style="list-style-type: none"> • Fencing • Security cameras • Remote monitoring • Emergency response procedures

12. Management and Staffing Structure



13. Environmental Objectives and Targets and Environmental Management Programme

The Environmental Objectives and Targets for 2017 and 2018 are included in Appendix C. The objectives and targets include the details of the Environmental Management Programme with the timeframe, responsibility and means to achieve targets as per condition 2.2.2.3. The 2017 Objectives and Targets includes details of the progress achieved in 2017.

Appendices

Appendix A – Summary of Waste Accepted onsite in 2017

Appendix B – Monitoring Results: Ambient Monitoring (Dust & Groundwater), Noise Monitoring, Storm water.

Appendix C – Schedule of Objectives and Targets 2017 & 2018

Appendix D – Copy of Pollution Release and Transfer Register (PRTR) 2017

Appendix A – Summary of Waste Accepted onsite in 2017, 2016 & 2015

LoW Code	Waste Description	Tonnage 2017	Tonnage 2016	Tonnage 2015
150104	Aluminium Cans	4.65	2.48	1.44
200201	Brown Bin Waste	841.14	880.345	906.61
200307	Bulky	3027.378	2671.71	2670.815
170411	Cable	0	0.38	1.54
150101	Cardboard	476.06	709.05	1494.05
080318	Cartridges	1.649	1.69	0.62
191210	Combustible Waste (RDF)	0	0	869.39
191212	Combustible Waste (RDF)	5895.1	4183.152	0
191204	Clear film	0.2	11.24	0
200201	Garden Waste	63.82	57.6	39.78
170802	Gypsum	6.82	51.58	0
170203	Hard Plastic	155.645	153.48	140.14
200139	HDPE Bottles	6.76	4.72	17.12
200307	Matresses	81.58	66.796	60.24
170407	Metal from C&D Sites	21.78	28.22	61.88
170904	Mixed C&D	583.72	521.46	444.35
170107	Mixed Concrete and Bricks	110.12	98.72	69.3
200301	Mixed Dry Recyclables	8172.64	8199.597	8238.75
150107	mixed Glass	80.03	198.13	450.14
200140	Mixed Metal	19.1	25.1	58.54
200139	Mixed Plastic Bottles	191.83	266.72	161.95
200301	Mixed Waste	33007.017	33197.043	29597.552
200101	Paper	2154.34	2049.493	1639.58
200101	Paper Shredding	8.72	16.64	12.35
200139	PET Bottles	0	6.39	17.08
170802	Plasterboard	6.9	0.1	29
200139	Plastic Film	0	0	5.16
150102	Plastic Film	6.47	0.48	0
200102	Plate Glass	33.94	61.48	56.3
200139	Polyethylene	2.84	2.34	0.9
190801	TP Screenings	20.3	20	0
200136	WEEE	9.31	8.55	5.22
191207	Wood Chip	0	0	0
170201	Wood from C&D Sites	1157.011	882.63	869.52
200301	Sludge	0	0	31.32
150102	Polystrene	7.68	9.22	3.25
170201	Low Grade Timber	0	0	35.38
170407	Light Steel	0	216.48	0.22
191209	Inert Soil and Stone	57.96	1.8	19.3
200108	CAT3	2.78	6.36	1.665
200201	Biodegradeable waste	0	0	6.1

200138	Wood	128.58	96.86	67.45
020304	Materials Unsuitable	103.19	0	0
191204	PET Bottles	7.46	0	0
150102	Soft Plastic Packaging	21.54	0	0
TOTAL Waste Accepted		56476.06	54708.036	48084.002

Appendix B – Monitoring Results: Ambient Monitoring (Dust & Groundwater), Noise Monitoring, Storm water.

Dust Monitoring Results W0253-01 2017

Depositional Dust							
Report No.	Date up	Date down	D-1	D-2	D-3	D-4	D-5
			mg/m ² /day				
ECS5304-Qtr 1	27/01/2017	28/02/2017	111	211	239	139	217
ECS5304-Qtr 2	25/05/2017	25/05/2017	178	161	155	132	161
ECS5304-Qtr 3	18/07/2017	22/08/2017	477	403	457	561	477
ECS5304-Qtr 1	27/01/2017	28/02/2017	111	211	239	139	217

Groundwater Monitoring Results W0253-01 2017

Parameter	Units	GW-1	Well Borehole	GW-1	Well Borehole
		From Puraflo System prior to percolation	Deep well at gate entrance	From Puraflo System prior to percolation	Deep well at gate entrance
		21/06/2017	21/06/2017	04/10/2017	04/10/2017
Color	-	Pale Yellow	Clear	Pale/Clear	Clear
Solids	-	None	None	None	None
Odour	-	None	None	Faint	None
pH	pH units	6.7	7.3	6.6	7.3
NH3-N	mg/l	9.9	0.26	9.5	0.64
BOD	mg/l O ₂	3	<2	<2	<2
COD	mg/l O ₂	51	<10	36	<10
Conductivity @ 25°C	µS/cm	585	680	458	608
Suspended solids	mg/l	53	11	<5	<5
Total Nitrogen	mg/l	33	<1	27	<1
P04-P	mg/l	5.2	<0.16	3.8	0.02
Chloride	mg/l	86	41	54	32
Fluoride	mg/l	0.21	<0.1	0.5	<0.01
N03-N	mg/l	21	<0.05	11	<0.04

Noise Monitoring Results W0253-01 2017

Quarterly Noise Monitoring Clean Ireland							
				Qtr1	Qtr2	Qtr3	Qtr 4
				28/02/17	25/04/17	18/07/17	23/10/17
Day Time Noise Monitoring 7am to 7pm Licence Limit 55dB(A)	Location	Duration	LA_{eq} dB(A)	LA_{eq} dB(A)	LA_{eq} dB(A)	LA_{eq} dB(A)	
	NSL-1	30 min	54	52	50	52	
		30 min	54	52	52	51	
		30 min	53	53	49	45	
	NSL-2	30 min	51	50	50	49	
		30 min	51	51	55	51	
		30 min	51	50	48	48	
	NSL-3	30 min	54	42	41	45	
		30 min	49	44	46	48	
		30 min	50	47	45	47	
	Evening Time 7pm to 11pm Licence 50dB(A)	NSL-1	30 min	42	47	44	45
		NSL-2	30 min	49	45	47	43
		NSL-3	30 min	47	48	47	39

Storm Water Monitoring Results W0253-01 2017

SW 1 Parameter	Units	Qtr1	Qtr 2	Qtr 3	Qtr 4
		28/02/17	29/06/17	25/09/17	23/11/17
		ECS5304	ECS5304	ECS5304	ECS5304
Visual	Colour	Clear	Clear	Clear	Clear
	Solids	Some	Some	Some	Few
	Odour	None	None	None	Faint
pH result	<i>pH units</i>	7.7	7.7	7.9	7.7
Conductivity @ 25°C	<i>µS/cm</i>	513	645	672	557
SW-1 Suspended solids	<i>mg/l</i>	25	<5	<5	19
SW-1 BOD	<i>mg/l O2</i>	2	<2	<2	5
COD	<i>mg/l O2</i>	25	12	14	22
SW-1 NH3-N	<i>mg/l</i>	0.13	1	0.29	0.12
Sulphate	<i>mg/l</i>	60	3.4	83	55
Total Nitrogen	<i>mg/l</i>	<1	<1.0	1.4	<1.00
Mineral Oil**	<i>µg/l</i>	<10	<10	<10	<10

SW 2 Parameter	Units	Qtr1	Qtr 2	Qtr 3	Qtr 4
		28/02/17	29/06/17	25/09/17	23/11/17
		ECS5304	ECS5304	ECS5304	ECS5304
Visual	Colour	V. Pale yellow	V. Pale yellow	V. Pale Yellow	V. Pale Yellow
	Solids	Some	Some	Some	Few
	Odour	None	None	None	None
pH result	<i>pH units</i>	7	7.8	6.6	7
Conductivity @ 25°C	<i>µS/cm</i>	946	647	712	771.5
SW-2 Suspended solids	<i>mg/l</i>	66	<5	5	10
SW-2 BOD	<i>mg/l O2</i>	10	<2	<2	7
COD	<i>mg/l O2</i>	70	<10	29	54
SW-2 NH3-N	<i>mg/l</i>	0.95	0.06	1	0.34
Sulphate	<i>mg/l</i>	290	8.2	137	193
Total Nitrogen	<i>mg/l</i>	3.7	<1.0	12	1.2
Mineral Oil**	<i>µg/l</i>	<10	<10	<10	<10

Appendix C – Schedule of Objectives and Targets 2016 & 2017

Environmental Objectives and Targets 2017 as required by Condition 2.2.2.2 of EPA Waste Licence W0253-01

Ref No.	Objective	Target	Status (% completed)		How target are progressed	Responsibility	The time within which they may be achieved	END OF YEAR Comments/Progress
1	Environmental management System	Continued roll out Environmental management System	Ongoing	0%	Ongoing review of procedures documentation objectives targets records training to SO standards	Environmental Officer	ongoing	in place and integrating with licence requirements. upgraded/reviewed to meet new standard. Documents reviewed Nov17.
2	Environmental Training Awareness	To ensure that every employees are made aware of conditions set out in EPA Licence W0253-01 and the requirements set out in the Environmental management System. All site staff to be trained in relation to Fire Risk Assessment and Storage Plan.	Ongoing	100%	Identify environmental training needs of all employees. Continue internal training programme and assessment of training needs for all operational staff	Facility manager/ Environmental Officer	Ongoing	Ongoing
3	Plant and vehicle maintenance Programme	Establish and maintain a programme for maintenance of all plant and equipment as per Condition 2.2.2.2 of Waste Licence	Ongoing	100%	Documented maintenance programme to be updated as required. Development of spare parts stock.	Maintenance Team	1 17	Spare parts stock being reconsidered as not necessary. Schedule in place and continually updated.
	Annual Review	management Team to review compliance with licence conditions E S improvements and Objective Targets set out.	Ongoing	0%	Review environmental performance of the facility	management/ Environmental Officer	ongoing	meetings held wrt compliance. E S and Objectives and targets reviewed in November 2017
5	Environmental monitoring	As per Waste Licence Should any limits be exceeded corrective actions to be implemented.	Ongoing	100%	Continue to monitor emissions from site and investigate any exceedance of trigger levels. Agree new service contract for monitoring.	Environmental Officer	Ongoing	investigations and reports completed and submitted to EPA or kept on file as required.
7	Surface Water management	Install manual Shut-off valves on surface/wastewater discharge drains. D the valves at location.	Ongoing	100%	Procurement of 3 quotations following by installation	management	Ongoing	installed at SW1 and SW2 2 2017.
		Develop procedures for manual shut down of valves. include in E S and training records.	Ongoing	0%	Following installation of valves	management	Ongoing	Procedures reviewed/updated November 2017.
		Upgrade drainage system and the diversion of roof storm water directly to stream	Ongoing	20%	Review of site drainage	management/ Environmental Officer	Ongoing	quotes received.

10		Review progress against stormwater trigger values from yard runoff and detail action items to reduce at source	Ongoing	0%	On review of quarterly monitoring report	Management/ Environmental Officer	Ongoing	Response Programme submitted to EPA 20.07.17. Awaiting reply from EPA re trigger levels. Investigations undertaken and documented.
11	Silt Traps and Oil Separators	Purchase and install interceptors	Ongoing	20%	Engineer to calculate the area minus the roof area. Details to be furnished to suppliers for procurement of interceptors	Management/ Environmental Officer	Ongoing	Under review.
12	Weather system	Compliance Re Weather Monitoring Station as per Condition 3.23 of Waste Licence	Ongoing	50%	Following discussion with EPA send notification for approval of intention not to install weather system	Environmental Officer	1/17	Wording drafted for approval.
13	Additional improvements	As per licence amendment Assessment of Fire-water Retention to be included in fire plan.	Ongoing	0%	Appoint consultants	Management		FRA submitted to EPA 10/02/17 approved by EPA 11/12/17
14	Leachate tank and bund (including foul) integrity Testing	Carry out integrity testing on all underground tanks and pipes in accordance with Condition 3.10 of Waste Licence	Ongoing	100%	Organise 2017 testing.	Environmental Officer		Leachate tank and bund to be tested in August 2017. All testing up to date.
15	Noise Management Programme	Prepare programme in accordance with Condition 3.13 of Waste Licence.	Ongoing	50%	Review programme based on findings of Noise Surveys Review annually	Environmental Officer	Mar-17	Draft in preparation.
16	Energy Efficiency/ Utility conservation	Improve energy efficiency of equipment on site.	Ongoing	70%	Continue upgrading items highlighted in Energy Audit. Efficiency to be considered during purchasing.	Facility Manager	Ongoing	Ongoing
17	Closure Plan	Prepare Decommissioning Management Plan (DMP) as per Condition 10.2 of Waste Licence	Ongoing	100%	Finalise Report. Review annually and submit as part of AER	Management	1/17	Submitted to EPA 01/03/17 approved 05/03/17. Financial provision approved and in place.
18	ELRA	Prepare Environmental Liabilities Risk Assessment as per Condition 12.2 of Waste Licence	Ongoing	100%	Finalise Report. Review every three years and submit as part of AER	Management	1/17	ELRA submitted approved and financial provision approved and in place.

Environmental Objectives and Targets 2018 as required by Condition 2.2.2.2 of EPA Waste Licence W0253-01

Ref No.	Objective	Target	Status (% completed)		How target are progressed	Responsibility	The time within which they may be achieved	Comments/Progress
1	Environmental management System	Continued roll out Environmental management System	Ongoing	5%	Ongoing review of procedures documentation objectives targets records training to SO standards	All	3	Achieve certification to new standard
2	Environmental Training Awareness	To ensure that every employees are made aware of conditions set out in EPA Licence W0253-01 and the requirements set out in the Environmental management System. All site staff to be trained in relation to Fire Risk Assessment and Storage Plan.	Ongoing	0%	Identify environmental training needs of all employees. Continue internal training programme and assessment of training needs for all operational staff	Facility manager/EO	Ongoing	Ongoing
3	Annual Review	Management Team to review compliance with licence conditions EMS improvements and Objective Targets set out.	Ongoing	50%	Review environmental performance of the facility	Management/EO	2	
	Surface Water Management	Review trigger levels in conjunction with EPA	Ongoing	0%	Await EPA response to proposal.	Management/EO	1	
5	Underground and drainage (including foul) integrity Testing	Carry out integrity testing on all underground tanks and pipes in accordance with Condition 10 of Waste Licence	Ongoing	50%	Organise 2018 testing.	EO	2	
	Noise Management Programme	Prepare programme in accordance with Condition 13 of Waste Licence.	Ongoing	50%	Review programme based on findings of Noise Surveys Review annually	EO	2	
	Energy Efficiency/ Utility conservation	Improve energy efficiency of equipment on site.	Ongoing	50%	Review power and fuel requirements due to restructuring.	Management/EO	2	
8	Closure Plan	Revise	Ongoing	20%	Review annually and submit as part of AER	Management/EO	3	
	ELRA	Revise	Ongoing	20%	Finalise Report. Review every three year and submit as part of AER	Management/EO	3	



Guidance to completing the PRTR workbook

PRTR Returns Workbook

REFERENCE YEAR	2017
Version	1.1.19

1. FACILITY IDENTIFICATION	
Parent Company Name	Clean (fr) Refuse & Recycling Co
Facility Name	Clean (fr) Refuse & Recycling Co
PRTR Identification Number	W0253
Licence Number	W0253-01

Classes of Activity	
No.	class name
- Refer to PRTR class activities below	

Address 1	Ballaquinn West
Address 2	Crece
Address 3	County Clare
Address 4	
Country	Clare
Country	Ireland
Coordinates of Location	53.40664093000 52.73670466900
River Basin District	IRISH
NACE Code	8532
Main Economic Activity Recovery of sorted materials	
AER Returns Contact Name	Joanna Gannell
AER Returns Contact Email Address	jgannell@cleanfr.com
AER Returns Contact Position	Environmental Officer
AER Returns Contact Telephone Number	0656706500
AER Returns Contact Mobile Phone Number	1850361800
AER Returns Contact Fax Number	061363509
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	100
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES	
Activity Number	Activity Name
50.1	General

3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)	
Is it applicable?	No
Have you been granted an exemption?	No
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	
Do you import/accept waste onto your site for on-site treatment (either recovery or disposal activities)?	
Yes	
No	

Guidance on waste imported/accepted onto site
This question is only applicable if you are an IPPC or Quarry site

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO AIR

Please enter all quantities in this section in KGS

No. Annex II	Name	METHOD		QUANTITY	
		M/C/E	Description or Description	A (Accidental) KG/Year	F (Fugitive) KG/Year
				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

No. Annex II	Name	METHOD		QUANTITY	
		M/C/E	Description or Description	A (Accidental) KG/Year	F (Fugitive) KG/Year
				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 No.	Name	METHOD		QUANTITY	
		M/C/E	Description or Description	A (Accidental) KG/Year	F (Fugitive) KG/Year
				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 additional data on the quantities of methane flared and / or utilised. Operators should only report their Net methane (CH4) emission to the environment under Total (KG/yr) for Sector A: Sector specific PRTR pollutants above. Please complete the table below:

Landfill: Clean (H) Refuse & Recycling Co.

Additional pollutant no	T (Total) kg/Year	Method Used		Facility Total Capacity m3 per hour
		M/C/E	Description or Description	
Total estimated methane generation (as reported in Section A above)	0.0			N/A
Methane flared	0.0			0.0 (Total Flaring Capacity)
Methane utilised in engines	0.0			0.0 (Total Utilising Capacity)
Net methane emission (as reported in Section A above)	0.0			N/A

Please enter summary data on the quantities of methane flared and / or utilised

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE
Please enter all quantities on this sheet in Tonnes

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 Distillation Facility Name and Licence/Permit No of Recycler/Disposer	Haz Waste - Address of Next Non-Haz Waste Address of Recycler/Disposer	Name and Licence / Permit No. and No. of Final Recycler/Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	13 05 08	Yes	3.7	mixtures of wastes from gift chambers and oil/water separators	R12	M	Weighted	Offsite in Ireland	Enva Ireland Ltd,W0196-01	John F Kennedy Rd, Naas Road,Dublin,Dublin,Ireland	ENVA Ireland,W0184-01,Clonminam Industrial estate,Portlaoise,Co Laois,Ireland	Clonminam Industrial estate,Portlaoise,Co Laois,Ireland
To Other Countries	15 01 01	No	174.86	paper and cardboard packaging	R12	M	Weighted	Abroad	Paulo Paper Recycling,DO 02.2017 MDO	Baerhoekeweg 4, 3313 LA,Dordrecht,Netherlands		
To Other Countries	15 01 01	No	528.44	paper and cardboard packaging	R12	M	Weighted	Abroad	Recycling UK,NSO:544843B	11Aviation Business Park,Middlewich Road,Natwich,Cheshire,CW5 8PF,United Kingdom		
Within the Country	15 01 02	No	0.0	plastic packaging	R12	M	Weighted	Offsite in Ireland	Environ T/A Leinster Environmental,WFP-LH-11-0002-01	Park,Hayresstown TD,Haggardstown Duncalk,Co Louth,Ireland		
Within the Country	15 01 07	No	160.9	glass packaging	R5	M	Weighted	Offsite in Ireland	Glassco Recycling Ltd,WFP-KE-08-0357-01	Unit 4,Oberstown business park,Carragh road,Naas Co,Kilclare,Ireland		
Within the Country	16 01 03	No	0.0	enc-of-life tyres components removed from discarded equipment other than those mentioned in 16 02 15	R12	M	Weighted	Offsite in Ireland	Arch Recycling ,WFP-CE-11-0001-01	Crown,Crown,Lisseyvasey,C o Clare,Ireland	Cappincur industrial estate,Dairgean Road,Tullamore,Co. Offally,Ireland	Cappincur industrial estate,Dairgean road,Tullamore,Co Offally,Ireland
Within the Country	16 02 16	No	0.0	02 15	R12	M	Weighted	Offsite in Ireland	KMK Metals Recycling,W0133-03		KMK Metals Ltd,W0113-03,Cappincur industrial estate,Dairgean road,Tullamore,Co Offally,Ireland	
Within the Country	16 06 01	Yes	0.62	lead batteries	R12	M	Weighted	Offsite in Ireland	KMK Metals Recycling,W0133-03			
Within the Country	17 02 01	No	1294.26	wood	R3	M	Weighted	Offsite in Ireland	OCF Waste Management Ltd,WFP-RN-10-0001-01	Rosborough, Roscommon,Ireland		
Within the Country	17 04 03	No	0.0	lead	R12	M	Weighted	Offsite in Ireland	Galway Metal Company,WFP-Garwomoneash,Oranmore,Galway,Ireland			
Within the Country	17 04 07	No	216.48	mixed metals	R12	M	Weighted	Offsite in Ireland	Galway Metal Company,WFP-Garwomoneash,Oranmore,Galway,Ireland			
Within the Country	17 08 02	No	75.68	gypsum-based construction materials other than those mentioned in 17 08 01	R5	M	Weighted	Offsite in Ireland	Allied Waste management Ltd,WFP-KE-08-0347-01	Unit 74A,Naas industrial estate,Naas,Kilclare,Ireland		
Within the Country	19 07 03	No	27.9	leachate other than those mentioned in 19 07 02	R12	M	Weighted	Offsite in Ireland	Bunlicky WWTP,D0013-01	Dock Road,Limerick,Limerick,Limerick,Ireland		
To Other Countries	19 12 04	No	0.0	plastic and rubber	R12	M	Weighted	Abroad	Envirogreen Recycling Ltd,WVEX03/45	Road,Richill,Armagh,B61 9LT,United Kingdom		
Within the Country	19 12 04	No	0.0	plastic and rubber	R12	M	Weighted	Offsite in Ireland	Barna Recycling,W0106-2	Clearplas Ireland Clearplas Ireland		
Within the Country	19 12 04	No	24.56	plastic and rubber	R12	M	Weighted	Offsite in Ireland	Lig,WFP/MH14/0001/01	Kells,meath,Ireland		
Within the Country	19 12 04	No	12.6	plastic and rubber	R12	M	Weighted	Offsite in Ireland	Environ T/A Leinster Environmental,WFP-LH-11-0002-01	Park,Hayresstown TD,Haggardstown Duncalk,Co Louth,Ireland		
Within the Country	19 12 09	No	383.22	minerals (for example sand, stones)	R5	M	Weighted	Offsite in Ireland	Powerslow,Lancill site,W0025-03	Kilhenry Road,Co Carlow,Ireland		

To Other Countries	20 01 01	No	907.7 paper and cardboard	R12	M	Weighted	Abroad	Peute Papier Recycling,DO 02.2017 MDO	Baanhoekweg 4 3313 ,LA,Dordrecht,...,Netherlands
To Other Countries	20 01 01	No	1006.34 paper and cardboard	R12	M	Weighted	Abroad	Recycling UK, NSO:544843/B Split Hill	11 Alveston Business Park, Middleswich Road, Natwich, Cheshire CW5 6PF, United Kingdom
Within the Country	20 01 02	No	85.04 glass	R5	M	Weighted	Offsite in Ireland	John Gannon Concrete,WFP-WM-2009-007-01	Quarry,Haselwood,Kilbeggan ,Co Westmeath,Ireland
Within the Country	20 01 08	No	502.52 biodegradable kitchen and canteen waste	R3	M	Weighted	Offsite in Ireland	McDonnell Farm Biogas Lic,WFP/LK/2011/50/R2/T1	Dunmoylan,Shanagolden,Limerick,Ireland
Within the Country	20 01 08	No	0.0 biodegradable kitchen and canteen waste	R3	M	Weighted	Offsite in Ireland	Barna Recycling,W0106-2	Carrowbrowne,Headford road,Galway,...,Ireland
Within the Country	20 01 36	No	discarded electrical and electronic equipment other than those mentioned in 20 18.62 01 21, 20 01 23 and 20 01 35	R12	M	Weighted	Offsite in Ireland	KMK, Metals Recycling,W0133-03	Cappincur industrial estate,Dairrigan Road,Tullamore,Co. Offaly,Ireland
Within the Country	20 01 39	No	20.64 plastics	R12	M	Weighted	Offsite in Ireland	Leinster T/A Leinster Environmentals,WFP-LH-11-0002-01	Clermont Business Park,Haynestown TD,Hagerstown,Durcalk,Co Louth,Ireland
Within the Country	20 01 39	No	0.0 plastics	R12	M	Weighted	Offsite in Ireland	Environgreen Recycling Ltd,WME/X03/45	Road,Richhill,Armagh,B61 9LT,United Kingdom
Within the Country	20 01 40	No	0.0 metals	R12	M	Weighted	Offsite in Ireland	Galway Metal Company,WFP-T1-G-0005-01	Carrowmoreash,Oranmore,Galway ...Ireland
Within the Country	20 02 01	No	0.0 biodegradable waste	R12	M	Weighted	Offsite in Ireland	Barna Recycling,W0106-2	Carrowbrowne,Headford road,Galway,...,Ireland
Within the Country	20 03 01	No	4410.85 mixed municipal waste	R12	M	Weighted	Offsite in Ireland	Kilarney Waste disposal,W0217-01	Aughacouran,Kilarney ...Co. Kerry,Ireland
Within the Country	20 03 01	No	1458.21 mixed municipal waste	D14	M	Weighted	Offsite in Ireland	Drehid Landfill,W0201-03	Parsonstown Loughnacush Killeaskein,Drumond Timahoe west,Coolcarrigan,Carbury Co Kildare,Ireland
Within the Country	20 03 01	No	190.34 mixed municipal waste	D14	M	Weighted	Offsite in Ireland	Powerslowan Landfill site,W0025-03	Co Kildare,Ireland
To Other Countries	20 03 01	No	32827.17 mixed municipal waste	R1	M	Weighted	Abroad	Eesti Energia,10421629	Kilkenny Road,...,Co Carlow,...,Ireland
Within the Country	20 03 07	No	1275.7 bulky waste	D14	M	Weighted	Offsite in Ireland	Drehid Landfill,W0201-03	105 peterburtt road,Maarcou,...,74114,Estonia
Within the Country	20 03 07	No	858.62 bulky waste	D14	M	Weighted	Offsite in Ireland	Powerslowan Landfill site,W0025-03	Parsonstown Loughnacush Killeaskein,Drumond Timahoe west,Coolcarrigan,Carbury Co Kildare,Ireland
Within the Country	15 01 04	No	1.22 metallic packaging	R12	M	Weighted	Offsite in Ireland	Kilarney Waste disposal,W0217-01	Kilkenny Road,...,Co Carlow,...,Ireland
Within the Country	17 04 02	No	5.78 aluminium	R12	M	Weighted	Offsite in Ireland	Galway Metal Company,WFP-T1-G-0005-01	Carrowmoreash,Oranmore,Galway ...Ireland
Within the Country	17 04 11	No	cables other than those mentioned in 17 04 0.8 10	R12	M	Weighted	Offsite in Ireland	Galway Metal Company,WFP-T1-G-0005-01	Galway ...Ireland Ballymount
Within the Country	15 01 01	No	25.04 paper and cardboard packaging	R12	M	Weighted	Offsite in Ireland	Irish Packaging Recycling,W0283-01	Road,Walkinstown,Dublin 12,D12,Ireland
Within the Country	17 04 07	No	378.51 mixed metals	R12	M	Weighted	Offsite in Ireland	Galway Metal Company,WFP-T1-G-0005-01	Galway ...Ireland Ballykeefe,Dock Road,Limerick,Ireland
Within the Country	15 01 07	No	120.82 glass packaging	R12	M	Weighted	Offsite in Ireland	Status Eco Holdings Ltd (Limerick),W0082-02	nd

Previous years data is correct as at 26/02/2018 11:42

Type of Waste	Previous Year Total	Current Year Total	Percentage Change
Hazardous Waste inside the country for disposal	0	0	0
Hazardous Waste inside the country for recovery	4.64	1.18	-74.56896552
Hazardous Waste outside the country for disposal	0	0	0
Hazardous Waste outside the country for recovery	0	0	0
Non-Hazardous Waste for disposal	4334.65	5118.786	18.08994959
Non-Hazardous Waste for recovery	49478.26	53845.369	8.826318872