Facility Information Summary	
AER Reporting Year	2017
Licence Register Number	W0021-02
Name of site	Derrinumera Landfill Site
Site Location	Newport, Co. Mayo
NACE Code	A3
Class/Classes of Activity	Class 5 & Class 2,3 &4.
National Grid Reference (6E, 6 N)	293525E,104250N

A description of the activities/processes at the site for the reporting year. This should include information such as production increases or decreases on site, any infrastructural changes, environmental performance which was measured during the reporting year **and an overview of compliance with your licence** listing all exceedances of licence limits (where applicable) and what they relate to e.g. air, water, noise.

Landfill closed since 2012, operating as a Civic Amenity site. No exceedences of licence limits. No incidents.

Declaration:

All the data and information presented in this report has been checked and certified as being accurate. The quality of the information is assured to meet licence requirements.

Signature	14/03/2018
Group/Facility deputy manager	Date
(or nominated, suitably qualified and experienced deputy)	

AIR-summary template

Lic No: W0021-02 Year 2017

Answer all questions and complete all tables where relevant

			Additional information
1	Does your site have licensed air emissions? If yes please complete table A1 and A2 below for the current reporting year and answer further questions. If **you do not have** licenced emissions and **do not complete a solvent management plan** (table A4 and A5) you do not need to complete the tables	No	

Periodic/Non-Continuous Monitoring

2	Are there any results in breach of licence requirements? If yes please provide brief details in the comment section of TableA1 below		No	
3	Was all monitoring carried out in accordance with EPA guidance note AG2 and using the basic air monitoring checklist?	Basic air monitoring checklist AGN2	SELECT	

Table A1: Licensed Mass Emissions/Ambient data-periodic monitoring (non-continuous)

Emission reference no:	Parameter/ Substance	Frequency of Monitoring	ELV in licence or any revision therof	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence limit	Method of analysis	Annual mass load (kg)	Comments - reason for change in % mass load from previous year if applicable
	SELECT			SELECT		SELECT	SELECT	SELECT		
	SELECT			SELECT		SELECT	SELECT	SELECT		
	SELECT			SELECT		SELECT	SELECT	SELECT		
	SELECT			SELECT		SELECT	SELECT	SELECT		

Note 1: Volumetric flow shall be included as a reportable parameter

AIR-summary template	Lic No:	W0021-02	Year	2017

Continuous Monitoring

4	Does your site carry out continuous air emissions monitoring?	SELECT	
	If yes please review your continuous monitoring data and report the required fields below in Table A2 and compare it to its relevant Emission Limit Value (ELV)		
5	Did continuous monitoring equipment experience downtime? If yes please record downtime in table A2 below	SELECT	
6	Do you have a proactive service agreement for each piece of continuous monitoring equipment?	SELECT	
7	Did your site experience any abatement system bypasses? If yes please detail them in table A3 below	SELECT	

Table A2: Summary of average emissions -continuous monitoring

Emission reference no:	Parameter/ Substance	ELV in licence or any revision therof	Averaging Period	Compliance Criteria	Units of measurement	Annual Emission	Annual maximum	Monitoring Equipment downtime (hours)	Number of ELV exceedences in current reporting year	Comments
	SELECT			SELECT	SELECT					
	SELECT				SELECT					
	SELECT				SELECT					
	SELECT				SELECT					
	SELECT				SELECT					

note 1: Volumetric flow shall be included as a reportable parameter.

Table A3: Abatement system bypass reporting table

Bypass protocol

Date*	Duration** (hours)	Location	Reason for bypass	Impact magnitude	Corrective action

* this should include all dates that an abatement system bypass occurred

** an accurate record of time bypass beginning and end should be logged on site and maintained for future Agency inspections please refer to bypass protocol link

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Solvent use and management on site

8 Do you have a total Emission Limit Value of direct and fugitive emissions on site? if yes please fill out tables A4 and A5

SELECT

Table A4: Solvent Management Plan Summary
Total VOC Emission limit value

Solvent regulations — Please refer to linked solvent regulations to complete table 5 and 6

Reporting year	Total solvent input on site (kg)	Total VOC emissions to Air from entire site (direct and fugitive)	Total VOC emissions as %of solvent input	Total Emission Limit Value (ELV) in licence or any revision therof	Compliance
					SELECT
					SELECT

Table A5: Solvent Mass Balance summary

	(I) Inputs (kg)	(O) Outputs (kg)						
Solvent	(I) Inputs (kg)	Organic solvent emission in waste	Solvents lost in water (kg)	Collected waste solvent (kg)	Fugitive Organic Solvent (kg)	Solvent released in other ways e.g. by-	Solvents destroyed onsite through	Total emission of Solvent to air (kg)
							Total	

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER) Lic No: W0021-02 Year 2017

			Additional information
1	Does your site have licensed emissions direct to surface water or direct to sewer? If yes please complete table W2 and W3 below for the current reporting year and answer further questions. If **you do not have** licenced emissions you only need to complete table W1 and or W2 for storm water analysis and visual inspections	No	
2	Was it a requirement of your licence to carry out visual inspections on any surface water discharges or watercourses on or near your site? If yes please complete table W2 below summarising only any evidence of contamination noted during visual inspections	Yes	No visual evidence of contamination

Table W1 Storm water monitoring

Location reference	Location relative to site activities	PRTR Parameter	Licenced Parameter	Monitoring date	ELV or trigger level in licence or any revision thereof*	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Comments
SW1	upstream	SELECT	BOD mg/l	average of all results		N/A	2.33	mg/L	SELECT	
SW1	upstream		Suspended Solids mg/l	average of all results		N/A	3.42	mg/L		
SW1	upstream		pH Units	average of all results		N/A	4.56	ph		Located in blanket peat, always shows low Ph.
SW1	upstream		Conductivity @20C uS/cm	average of all results		N/A	97.83	µS/cm @20oC		
SW1	upstream		Ammonia as NH3-N mg/l	average of all results		N/A	0.02	mg/L		
SW1	upstream		Total Phosphorus as P mg/l	average of all results		N/A	0.05	mg/L		
SW1	upstream		Dissolved Oxygen (%)	average of all results		N/A	94.45	%		
SW1	upstream		Orthophosphate as PO4-P mg/l	average of all results		N/A	0.01	mg/L		
SW1	upstream		Dissolved Oxygen (mg/l)	average of all results		N/A	9.10	mg/L		
SW2	downstream		BOD mg/l	average of all results		N/A	1.58	mg/L		
SW2	downstream		Suspended Solids mg/l	average of all results		N/A	4.75	mg/L		
SW2	downstream		pH Units	average of all results		N/A	6.74	ph		
SW2	downstream		Conductivity @20C uS/cm	average of all results		N/A	220.58	µS/cm @20oC		
SW2	downstream		Ammonia as NH3-N mg/l	average of all results		N/A	0.90	mg/L		
SW2	downstream		Total Phosphorus as P mg/l	average of all results		N/A	0.06	mg/L		
SW2	downstream		Dissolved Oxygen (%)	average of all results		N/A	95.63	%		
SW2	downstream		Orthophosphate as PO4-P mg/l	average of all results		N/A	0.01	mg/L		
SW2	downstream		Dissolved Oxygen (mg/l)	average of all results		N/A	9.27	mg/L		
	SELECT	SELECT	SELECT			SELECT		SELECT	SELECT	

*trigger values may be agreed by the Agency outside of licence conditions

Table W2 Visual inspections-Please only enter details where contamination was observed.

Location Reference	Date of inspection	Description of contamination	Source of contamination	Corrective action	Comments
			SELECT		
			SELECT		

Licensed Emissions to water and /or wastewater(sewer)-periodic monitoring (non-continuous)

3	Was there any result in breach of licence requirements? If yes please provide brief details in the comment section of Table W3 below	No	Additional information

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)				Lic No:	W0021-02	Year	2017
4	Was all monitoring carried out in accordance with EPA guidance and checklists for Quality of Aqueous Monitoring Data Reported to the EPA? If no please detail what areas require improvement in additional information box	External /Internal Lab Quality checklist	Assessment of results checklist	Yes			

Table W3: Licensed Emissions to water and /or wastewater (sewer)-periodic monitoring (non-continuous)

Emission reference no:	Emission released to	Parameter/ SubstanceNote 1	Type of sample	Frequency of monitoring	Averaging period	ELV or trigger values in licence or any revision therof[Note 2]	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Method of analysis	Procedural reference source	Procedural reference standard number	Annual mass load (kg)	Comments
	SELECT	SELECT	SELECT		SELECT		SELECT		SELECT	SELECT	SELECT	SELECT			

Note 1: Volumetric flow shall be included as a reportable parameter

Note 2: Where Emission Limit Values (ELV) do not apply to your licence please compare results against EQS for Surface water or relevant receptor quality standards

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER) Lic No: W0021-02 Year 2017

Continuous monitoring

			Additional Information
5	Does your site carry out continuous emissions to water/sewer monitoring?	No	

If yes please summarise your continuous monitoring data below in Table W4 and compare it to its relevant Emission Limit Value (ELV)

6	Did continuous monitoring equipment experience downtime? **If yes please record downtime in table W4 below**	SELECT	
7	Do you have a proactive service contract for each piece of continuous monitoring equipment on site?	SELECT	
8	Did abatement system bypass occur during the reporting year? **If yes please complete table W5 below**	SELECT	

Table W4: Summary of average emissions -continuous monitoring

Emission reference no:	Emission released to	Parameter/ Substance	ELV or trigger values in licence or any revision thereof	Averaging Period	Compliance Criteria	Units of measurement	Annual Emission for current reporting year (kg)	% change +/- from previous reporting year	Monitoring Equipment downtime (hours)	Number of ELV exceedences in reporting year	Comments
	SELECT	SELECT		SELECT	SELECT	SELECT					
	SELECT	SELECT		SELECT	SELECT	SELECT					

note 1: Volumetric flow shall be included as a reportable parameter.

Table W5: Abatement system bypass reporting table

Date	Duration (hours)	Location	Resultant emissions	Reason for bypass	Corrective action*	Was a report submitted to the EPA?	When was this report submitted?
						SELECT	

*Measures taken or proposed to reduce or limit bypass frequency

Bund/Pipeline testing template

Lic No: W0021-02 Year 2017

Bund testing

dropdown menu click to see options

		Additional information
1	Are you required by your licence to undertake integrity testing on bunds and containment structures ? if yes please fill out table B1 below listing all **new bunds and containment structures** on site, in addition to **all bunds which failed** the integrity test-**all bunding structures which failed including mobile bunds must be listed in the table below, please include all bunds outside the licenced testing period** (mobile bunds and chemstore included)	Yes	
2	Please provide integrity testing frequency period	3 years	
3	Does the site maintain a register of bunds, underground pipelines (including stormwater and foul), Tanks, sumps and containers? (containers refers to "Chemstore" type units and mobile bunds)	No	
4	How many bunds are on site?	6	
5	How many of these bunds have been tested within the required test schedule?	4	
6	How many mobile bunds are on site?	2	
7	Are the mobile bunds included in the bund test schedule?	No	
8	How many of these mobile bunds have been tested within the required test schedule?	1	
9	How many sumps on site are included in the integrity test schedule?	0	
10	How many of these sumps are integrity tested within the test schedule?	0	
	Please list any sump integrity failures in table B1		
11	Do all sumps and chambers have high level liquid alarms?	Yes	
12	If yes to Q11 are these failsafe systems included in a maintenance and testing programme?	No	
13	Is the Fire Water Retention Pond included in your integrity test programme?	N/A	

Table B1: Summary details of bund /containment structure integrity test

Bund/Containment structure ID	Type	Specify Other type	Product containment	Actual capacity	Capacity required*	Type of integrity test	Other test type	Test date	Integrity reports maintained on site?	Results of test	Integrity test failure explanation <50 words	Corrective action taken	Scheduled date for retest	Results of retest(if in current reporting year)
Tank 1	reinforced concrete		leachate	450m3		Hydraulic test		Sep-17	Yes	Pass			Due 2020	
Tank 2	reinforced concrete		leachate	450m3		Hydraulic test		Sep-17	Yes	Pass			Due 2020	
Tank 3	reinforced concrete		leachate	450m3		Hydraulic test		Sep-17	Yes	Pass			Due 2020	
Chemstore	prefabricated	metal	household haz material											
Recirculation tank cell 1	prefabricated	plastic	leachate	2.5m3	110%	Other (please specify)	manufacterers		Yes					
Recirculation tank cell 2	prefabricated	plastic	leachate	2.5m3	110%	SELECT	manufacterers		No	SELECT		SELECT		
	SELECT					SELECT			SELECT	SELECT		SELECT		

* Capacity required should comply with 25% or 110% containment rule as detailed in your licence

		Commentary
15	Has integrity testing been carried out in accordance with licence requirements and are all structures tested in line with BS8007/EPA Guidance? bunding and storage guidelines	Yes	
16	Are channels/transfer systems to remote containment systems tested?	No	
17	Are channels/transfer systems compliant in both integrity and available volume?	N/A	

Pipeline/underground structure testing

1	Are you required by your licence to undertake integrity testing* on underground structures e.g. pipelines or sumps etc ? if yes please fill out table 2 below listing all underground structures and pipelines on site **which failed the integrity test and all which have not been tested withing the integrity test period as specified**	No	
2	Please provide integrity testing frequency period	SELECT	

*please note integrity testing means water tightness testing for process and foul pipelines (as required under your licence)

Table B2: Summary details of pipeline/underground structures integrity test

Structure ID	Type system	Material of construction:	Does this structure have Secondary containment?	Type of secondary containment	Type integrity testing	Integrity reports maintained on site?	Results of test	Integrity test failure explanation <50 words	Corrective action taken	Scheduled date for retest	Results of retest(if in current reporting year)
	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT				SELECT

Please use commentary for additional details not answered by tables/ questions above

Groundwater/Soil monitoring template	Lic No:	W0021-02	Year	2017

			Comments	
1	Are you required to carry out groundwater monitoring as part of your licence requirements?	yes		Please provide an interpretation of groundwater monitoring data in the interpretation box below or if you require additional space please include a groundwater/contaminated land monitoring results interpretaion as an additional section in this AER
2	Are you required to carry out soil monitoring as part of your licence requirements?	no		
3	Do you extract groundwater for use on site? If yes please specify use in comment section	no		
4	Do monitoring results show that groundwater generic assessment criteria such as GTVs or IGVs are exceeded or is there an upward trend in results for a substance? If yes, please complete the Groundwater Monitoring Guideline Template Report (link in cell G8) and submit separately through ALDER as a licensee return AND answer questions 5-12 below. Groundwater monitoring template	SELECT	GW report completed.	There is a plume of contaminated GW in the downgradient area of the site. This has been investigated on a number of occassions, including by geophysical survey, and relates to waste landfilled prior to licencing. There has been a cut-off wall installed which effects the shallow wells. The plume is reducing both in size and concentration over time and will continue to be monitored as part of the aftercare associated with the site. The groundwater assessment was submitted in 2016.
5	Is the contamination related to operations at the facility (either current and/or historic)	yes		
6	Have actions been taken to address contamination issues?If yes please summarise remediation strategies proposed/undertaken for the site	yes	Cut-off wall installed and wellpoint GW	
7	Please specify the proposed time frame for the remediation strategy	N/A	works complete, operations on-going	
8	Is there a licence condition to carry out/update ELRA for the site?	yes	Contained in GW report	
9	Has any type of risk assesment been carried out for the site?	yes	Contained in GW report	
10	Has a Conceptual Site Model been developed for the site?	yes	Contained in GW report	
11	Have potential receptors been identified on and off site?	yes	Contained in GW report	
12	Is there evidence that contamination is migrating offsite?	yes	Contained in GW report	

Table 1: Upgradient Groundwater monitoring results

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration++	Average Concentration+	unit	GTV's*	SELECT**	Upward trend in pollutant concentration over last 5 years of monitoring data
2017	MW1A	**pH**	accredited lab	quarterly	7	6.975	**pH Units**			No
2017	MW1A	**Conductivity @20C**	accredited lab	quarterly	738	577	**uS/cm**			No
2017	MW1A	**Ammonia as NH3-N**	accredited lab	quarterly	0.076	0.02975	**mg/l**			No
2017	MW1A	**Total Phosphorus as P**	accredited lab	quarterly	0.11	0.09	**mg/l**			No
2017	MW1A	**Sodium, total**	accredited lab	quarterly	22	17	**mg/l**			No
2017	MW1A	**Chloride**	accredited lab	quarterly	37.7	25.15	**mg/l**			No
2017	MW1A	**Dissolved Oxygen (%)**	accredited lab	quarterly	103	88.85	**%Sat**			No

Groundwater/Soil monitoring template			Lic No:	W0021-02			Year	2017		
2017	MW1A	**Potassium, total**	accredited lab	quarterly	3	2.25	**mg/l**			No
2017	MW1A	**Orthophosphate as PO4-P**	accredited lab	quarterly	0.011	0.01025	**mg/l**			No
2017	MW1A	**Dissolved Oxygen (mg/l)**	accredited lab	quarterly	9.91	8.495	**mg/l**			No
2017	MW1A	**TOC**	accredited lab	quarterly	2.61	2.325	**mg/l**			No
2017	MW1A	**TON as N**	accredited lab	quarterly	0.01	0.01	**mg/l**			No
2017	MW1A	**Manganese, total**	accredited lab	Annual	343	343	**ug/l**			No
2017	MW1A	**Zinc, total**	accredited lab	Annual	14	14	**ug/l**			No
2017	MW1A	**Chromium, total**	accredited lab	Annual	1	1	**ug/l**			No
2017	MW1A	**Calcium, total**	accredited lab	Annual	113	113	**mg/l**			No
2017	MW1A	**Boron**	accredited lab	Annual	20	20	**ug/l**			No
2017	MW1A	**Nickel, total**	accredited lab	Annual	1	1	**ug/l**			No
2017	MW1A	**Lead, total**	accredited lab	Annual	2	2	**ug/l**			No
2017	MW1A	**Cadmium, total**	accredited lab	Annual	0.5	0.5	**ug/l**			No
2017	MW1A	**Total Coliforms (Filtration) (Environmental Waters)**	accredited lab	Annual	27	27	**cfu/100ml**			No
2017	MW1A	**Faecal Coliforms Filtration**	accredited lab	Annual	1	1	**cfu/100ml**			No
2017	MW1A	**Mercury, total (in water)**	accredited lab	Annual	0.1	0.1	**ug/l**			No
2017	MW1A	**Alkalinity Total by Autotitration**	accredited lab	Annual	409	409	**mg/l CaCO3**			No
2017	MW1A	**Copper, total**	accredited lab	Annual	2	2	**ug/l**			No
2017	MW1A	**Iron, total**	accredited lab	Annual	1609	1609	**ug/l**			No
2017	MW1A	**Cyanide (Total)**	accredited lab	Annual	0.009	0.009	**ug/l**			No
2017	MW1A	**Residue on Evaporation**	accredited lab	Annual	490	490	**mg/l**			No
2017	MW1A	**Magnesium, total**	accredited lab	Annual	18	18	**mg/l**			No
2017	MW1A	**Sulphate**	accredited lab	Annual	23.4	23.4	**mg/l**			No
2017	MW1A	**Fluoride**	accredited lab	Annual	0.038	0.038	**mg/l**			No
							SELECT			SELECT

.+ where average indicates arithmetic mean

.++ maximum concentration indicates the maximum measured concentration from all monitoring results produced during the reporting year

Table 2: Downgradient Groundwater monitoring results

Groundwater/Soil monitoring template				Lic No:	W0021-02			Year	2017	
Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration	Average Concentration	unit	GTV's*	SELECT**	Upward trend in yearly average pollutant concentration over last 5 years of monitoring data
2017	MW24	**pH**	accredited lab	quarterly	6.7	6.65	**pH Units**			No
2017	MW24	**Conductivity @20C**	accredited lab	quarterly	3530	2945	**uS/cm**			No
2017	MW24	**Ammonia as NH3-N**	accredited lab	quarterly	94.1	88.075	**mg/l**			No
2017	MW24	**Total Phosphorus as P**	accredited lab	quarterly	0.34	0.255	**mg/l**			No
2017	MW24	**Sodium, total**	accredited lab	quarterly	279	270	**mg/l**			No
2017	MW24	**Chloride**	accredited lab	quarterly	388	372.5	**mg/l**			No
2017	MW24	**Dissolved Oxygen (%)**	accredited lab	quarterly	75.6	65	**%Sat**			No
2017	MW24	**Potassium, total**	accredited lab	quarterly	54	49.25	**mg/l**			No
2017	MW24	**Orthophosphate as PO4-P**	accredited lab	quarterly	0.253	0.07075	**mg/l**			No
2017	MW24	**Dissolved Oxygen (mg/l)**	accredited lab	quarterly	6.88	5.1725	**mg/l**			No
2017	MW24	**TOC**	accredited lab	quarterly	92.4	81.65	**mg/l**			No
2017	MW24	**TON as N**	accredited lab	quarterly	0.416	0.1115	**mg/l**			No
2017	MW24	**Manganese, total**	accredited lab	Annual	5147	5147	**ug/l**			No
2017	MW24	**Zinc, total**	accredited lab	Annual	8	8	**ug/l**			No
2017	MW24	**Chromium, total**	accredited lab	Annual	8	8	**ug/l**			No
2017	MW24	**Calcium, total**	accredited lab	Annual	234	234	**mg/l**			No
2017	MW24	**Boron**	accredited lab	Annual	623	623	**ug/l**			No
2017	MW24	**Nickel, total**	accredited lab	Annual	9	9	**ug/l**			No
2017	MW24	**Lead, total**	accredited lab	Annual	0.6	0.6	**ug/l**			No
2017	MW24	**Cadmium, total**	accredited lab	Annual	0.6	0.6	**ug/l**			No
2017	MW24	**Total Coliforms (Filtration) (Environmental Waters)**	accredited lab	Annual	0	0	**cfu/100ml**			No
2017	MW24	**Faecal Coliforms Filtration**	accredited lab	Annual	1	1	**cfu/100ml**			No
2017	MW24	**Mercury, total (in water)**	accredited lab	Annual	0.1	0.1	**ug/l**			No

Groundwater/Soil monitoring template					Lic No:	W0021-02		Year	2017	
2017	MW24	**Alkalinity Total by Autotitration**	accredited lab	Annual	1218	1218	**mg/l CaCO3**			No
2017	MW24	**Copper, total**	accredited lab	Annual	1.2	1.2	**ug/l**			No
2017	MW24	**Iron, total**	accredited lab	Annual	51197	51197	**ug/l**			No
2017	MW24	**Cyanide (Total)**	accredited lab	Annual	0.009	0.009	**ug/l**			No
2017	MW24	**Residue on Evaporation**	accredited lab	Annual	1804	1804	**mg/l**			No
2017	MW24	**Magnesium, total**	accredited lab	Annual	27	27	**mg/l**			No
2017	MW24	**Sulphate**	accredited lab	Annual	5	5	**mg/l**			No
2017	MW24	**Fluoride**	accredited lab	Annual	0.2	0.2	**mg/l**			No
							SELECT			SELECT

*please note exceedance of generic assessment criteria (GAC) such as a Groundwater Threshold Value (GTV) or an Interim Guideline Value (IGV) or an upward trend in results for a substance indicates that further interpretation of monitoring results is required. In addition to completing the above table, please complete the Groundwater Monitoring Guideline Template Report at the link provided and submit separately through ALDER as a licensee return or as otherwise instructed by the EPA.

Groundwater monitoring template

More information on the use of soil and groundwater standards/ generic assessment criteria (GAC) and risk assessment tools is available in the EPA published guidance (see the link in G31)

Guidance on the Management of Contaminated Land and Groundwater at EPA Licensed Sites (EPA 2013).

**Depending on location of the site and proximity to other sensitive receptors alternative Receptor based Water Quality standards should be used in addition to the GTV e.g. if the site is close to surface water compare to Surface Water Environmental Quality Standards (SWEQS), If the site is close to a drinking water supply compare results to the Drinking Water Standards (DWS)

Surface water EQS | Groundwater regulations GTV's | Drinking water (private supply) standards | Drinking water (public supply) standards | Interim Guideline Values (IGV)

Groundwater/Soil monitoring template	Lic No:	W0021-02	Year	2017

Table 3: Soil results

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration	Average Concentration	unit
							SELECT
							SELECT

Where additional detail is required please enter it here in 200 words or less

	Environmental Liabilities template	Lic No:	W0021-02	Year	2017

Click here to access EPA guidance on Environmental Liabilities and Financial provision

			Commentary
1	ELRA initial agreement status	Submitted and agreed by EPA	
2	ELRA review status	Review completed	
3	Amount of Financial Provision cover required as determined by the latest ELRA	€2,747,250	
4	Financial Provision for ELRA status	Submitted and not agreed by EPA;	
5	Financial Provision for ELRA - amount of cover	€2,747,250	IPB providing quote for this amount
6	Financial Provision for ELRA - type	vironmental Impairment Liability insura	awaiting response from Agency
7	Financial provision for ELRA expiry date	Enter expiry date	not agreed yet
8	Closure plan initial agreement status	Closure plan submitted and agreed by EPA	
9	Closure plan review status	Review required and completed	
10	Financial Provision for Closure status	Submitted and not agreed by EPA;	
11	Financial Provision for Closure - amount of cover	Specify	Closure requirements paid out of general revenue budget. All capital works are complete.
12	Financial Provision for Closure - type	Other please specify	Letter of provision
13	Financial provision for Closure expiry date	Enter expiry date	Dirty closure so No date in placefor final closure

Environmental Management Programme/Continuous Improvement Programme template

Lic No: W0021-02 Year 2017

	Highlighted cells contain dropdown menu click to view		Additional Information
1	Do you maintain an Environmental Mangement System (EMS) for the site. If yes, please detail in additional information	Yes	
2	Does the EMS reference the most significant environmental aspects and associated impacts on-site	Yes	
3	Does the EMS maintain an Environmental Management Programme (EMP) as required in accordance with the licence requirements	Yes	
4	Do you maintain an environmental documentation/communication system to inform the public on environmental performance of the facility, as required by the licence	Yes	Available in public office

Environmental Management Programme (EMP) report

Objective Category	Target	Status (% completed)	How target was progressed	Responsibility	Intermediate outcomes
Energy Efficiency/Utility conservation	Continue to maintain both ga	100	general maintenance work carried out throughout the year to maximise gas capture. Change to Led lighting.	Individual	Improved Environmental Management Practices
SELECT		SELECT		SELECT	SELECT

Noise monitoring summary report	Lic No:	W0021-02	Year	2017

1	Was noise monitoring a licence requirement for the AER period? If yes please fill in table N1 noise summary below	Yes
2	Was noise monitoring carried out using the EPA Guidance note, including completion of the "Checklist for noise measurement report" included in the guidance note as table 6? (Noise Guidance note NG4)	Yes
3	Does your site have a noise reduction plan	No
4	When was the noise reduction plan last updated?	n/a
5	Have there been changes relevant to site noise emissions (e.g. plant or operational changes) since the last noise survey?	No

Table N1: Noise monitoring summary

Date of monitoring	Time period	Noise location (on site)	Noise sensitive location -NSL (if applicable)	LA_{eq}	LA_{90}	LA_{10}	LA_{max}	Tonal or Impulsive noise* (Y/N)	If tonal /impulsive noise was identified was 5dB penalty applied?	Comments (ex. main noise sources on site, & extraneous noise ex. road traffic)	Is site compliant with noise limits (day/evening/night)?
15/10/2015	30 mins		N6	61.9	35.8	67.4	75	No	SELECT	road traffic/dog barking	SELECT
15/10/2015	30 mins		N1	71	36.4	72.4	75	No		road traffic	
15/10/2015	30 mins	N2		43.7	33.6	45.8	92.8	No		truck horn, site traffic	Yes
15/10/2015	30 mins	N5		34.9	32.4	45.8	70.4	No		small stream/birds	Yes

*Please ensure that a tonal analysis has been carried out as per guidance note NG4. These records must be maintained onsite for future inspection

If noise limits exceeded as a result of noise attributed to site activities, please choose the corrective action from the following options? SELECT

** please explain the reason for not taking action/resolution of noise issues?
2015 data used as No changes to operational practice/machinery occurred. No noise complaints received.

Resource Usage/Energy efficiency summary

Lic No: W0021-02 Year 2017

			Additional information
1	When did the site carry out the most recent energy efficiency audit? Please list the recommendations in table 3 below	Enter date of audit	
2	Is the site a member of any accredited programmes for reducing energy usage/water conservation such as the SEAI programme linked to the right? If yes please list them in additional information	SEAI - Large Industry Energy Network (LIEN) — No	
3	Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional information	SELECT	

Table R1 Energy usage on site

Energy Use	Previous year	Current year	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*
Total Energy Used (MWHrs)	168.58	110.07		
Total Energy Generated (MWHrs)				
Total Renewable Energy Generated (MWHrs)	149.16	126.86		
Electricity Consumption (MWHrs)	168.58	110.07		
Fossil Fuels Consumption:				
Heavy Fuel Oil (m3)	0	0		
Light Fuel Oil (m3)	0.7	2.19		
Natural gas (m3)	0	0		
Coal/Solid fuel (metric tonnes)	0	0		
Peat (metric tonnes)	0	0		
Renewable Biomass	0	0		
Renewable energy generated on site	149.16	126.86		

* where consumption of energy can be compared to overall site production please enter this information as percentage increase or decrease compared to the previous reporting year.

** where site production information is available please enter percentage increase or decrease compared to previous year

Table R2 Water usage on site

					Water Emissions	Water Consumption	
Water use	Water extracted Previous year m3/yr.	Water extracted Current year m3/yr.	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*	Volume Discharged back to environment(m^3yr):	Volume used i.e not discharged to environment e.g. released as steam m3/yr	Unaccounted for Water:
Groundwater	0	0					
Surface water	0	0					
Public supply	150	150					
Recycled water	0	0					
Total	0	0					

* where consumption of water can be compared to overall site production please enter this information as percentage increase or decrease compared to the previous reporting year.

** where site production information is available please enter percentage increase or decrease compared to previous year

Table R3 Waste Stream Summary

	Total	Landfill	Incineration	Recycled	Other
Hazardous (Tonnes)		0	0		
Non-Hazardous (Tonnes)		0	0		

Resource Usage/Energy efficiency summary Lic No: W0021-02 Year 2017

Table R4: Energy Audit finding recommendations

Date of audit	Recommendations	Description of Measures proposed	Origin of measures	Predicted energy savings %	Implementation date	Responsibility	Completion date	Status and comments
			SELECT					
			SELECT					
			SELECT					

Table R5: Power Generation: Where power is generated onsite (e.g. power generation facilities/food and drink industry)please complete the following information

	Unit ID	Unit ID	Unit ID	Unit ID	Station Total
Technology					
Primary Fuel					
Thermal Efficiency					
Unit Date of Commission					
Total Starts for year					
Total Running Time					
Total Electricity Generated (GWH)					
House Load (GWH)					
KWH per Litre of Process Water					
KWH per Litre of Total Water used on Site					

Complaints and Incidents summary template Lic No: W0021-02 Year 2017

Complaints

Have you received any environmental complaints in the current reporting year? If yes please complete summary details of complaints received on site in table 1 below	No	Additional information

Table 1 Complaints summary

Date	Category	Other type (please specify)	Brief description of complaint (Free txt <20 words)	Corrective action< 20 words	Resolution status	Resolution date	Further information
	SELECT				SELECT		
	SELECT				SELECT		
	SELECT				SELECT		
	SELECT				SELECT		
	SELECT				SELECT		

Total complaints open at start of reporting year	0
Total new complaints received during reporting year	0
Total complaints closed during reporting year	0
Balance of complaints end of reporting year	0

Incidents

Have any incidents occurred on site in the current reporting year? Please list all incidents for current reporting year in Table 2 below	No	Additional information

*For information on how to report and what constitutes an incident	What is an incident

Table 2 Incidents summary

Date of occurrence	Incident nature	Location of occurrence	Incident category*please refer to guidance	Receptor	Cause of incident	Other cause(please specify)	Activity in progress at time of incident	Communication	Occurrence	Corrective action<20 words	Preventative action <20 words	Resolution status	Resolution date	Likelihood of reoccurence
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT

Total number of incidents current year	0
Total number of incidents previous year	3
% reduction/ increase	100

WASTE SUMMARY Lic No: W0021-02 Year 2017

SECTION A-PRTR ON SITE WASTE TREATMENT AND WASTE TRANSFERS TAB- TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES PRTR facility logon dropdown list click to see options

PRTR submitted

SECTION B- WASTE ACCEPTED ONTO SITE-TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES

			Additional Information
1	Were any wastes accepted onto your site for recovery or disposal or treatment prior to recovery or disposal within the boundaries of your facility ?; (waste generated within your boundaries is to be captured through PRTR reporting) If yes please enter details in table 1 below	No	
2	Did your site have any rejected consignments of waste in the current reporting year? If yes please give a brief explanation in the additional information	No	
3	Was waste accepted onto your site that was generated outside the Republic of Ireland? If yes please state the quantity in tonnes in additional information	No	

Table 1 Details of waste accepted onto your site for recovery, disposal or treatment (do not include wastes generated at your site, as these will have been reported in your PRTR workbook)

Licenced annual tonnage limit for your site (total tonnes/annum)	EWC code European Waste Catalogue EWC codes	Source of waste accepted	Description of waste accepted **Please enter an accurate and detailed description - which applies to relevant EWC code** European Waste Catalogue EWC codes	Quantity of waste accepted in current reporting year (tonnes)	Quantity of waste accepted in previous reporting year (tonnes)	Reduction/ Increase over previous year +/ - %	Reason for reduction/ increase from previous reporting year	Packaging Content (%)- only applies if the waste has a packaging component	Disposal/Recovery or treatment operation carried out at your site and the description of this operation	Quantity of waste remaining on site at the end of reporting year (tonnes)	Comments -

SECTION C-TO BE COMPLETED BY ALL WASTE FACILITIES (waste transfer stations, Composters, Material recovery facilities etc) EXCEPT LANDFILL SITES

4	Is all waste processing infrastructure as required by your licence and approved by the Agency in place? If no please list waste processing infrastructure required onsite	SELECT	
5	Is all waste storage infrastructure as required by your licence and approved by the Agency in place? If no please list waste storage infrastructure required on site	SELECT	
6	Does your facility have relevant nuisance controls in place?	SELECT	
7	Do you have an odour management system in place for your facility? If no why?	SELECT	
8	Do you maintain a sludge register on site?	SELECT	

SECTION D-TO BE COMPLETED BY LANDFILL SITES ONLY

Table 2 Waste type and tonnage-landfill only

Waste types permitted for disposal	Authorised/licenced annual intake for disposal (tpa)	Actual intake for disposal in reporting year (tpa)	Remaining licensed capacity at end of reporting year (m3)	Comments
N/A	0	0		Landfill Closed
			0	

Table 3 General information-Landfill only

Area ID	Date landfilling commenced	Date landfilling ceased	Currently landfilling	Private or Public Operated	Inert or non-hazardous	Predicted date to cease landfilling	Licence permits asbestos	Is there a separate cell for asbestos?	Accepted asbestos in reporting year	Total disposal area occupied by waste SELECT UNIT	Lined disposal area occupied by waste SELECT UNIT	Unlined area SELECT UNIT	Comments on liner type
N/A	circa 1974	Apr-12	No	Public	Non Hazardous	Ceased	No	No	No				

WASTE SUMMARY Lic No: W0021-02 Year 2017

Table 4 Environmental monitoring-landfill only

Landfill Manual-Monitoring Standards

Was meterological monitoring in compliance with Landfill Directive (LD) standard in reporting year +	Was leachate monitored in compliance with LD standard in reporting year	Was Landfill Gas monitored in compliance with LD standard in reporting year	Was SW monitored in compliance with LD standard in reporting year	Have GW trigger levels been established	Were emission limit values agreed with the Agency (ELVs)	Was topography of the site surveyed in reporting year	Has the statement under S53(A)(5) of WMA been submitted in reporting year	Comments
Yes	Yes	Yes	Yes	Yes	No	No	No	GW report completed in 2016 with trigger levels

.+ please refer to Landfill Manual linked above for relevant Landfill Directive monitoring standards

Table 5 Capping-Landfill only

Area uncapped*	Area with temporary cap	Area with final cap to LD Standard m2 ha, a	Area capped other	Area with waste that should be permanently capped to date under licence	What materials are used in the cap	Comments
SELECT UNIT	SELECT UNIT					
0	0	39,000m2	approx 42,000m2	39,000m2	1mm lldpe liner and .5m soil	

*please note this includes daily cover area

Table 6 Leachate-Landfill only

9	Is leachate from your site treated in a Waste Water Treatment Plant?	Yes
10	Is leachate released to surface water? If yes please complete leachate mass load information below	No

Volume of leachate in reporting year(m3)	Leachate (BOD) mass load (kg/annum)	Leachate (COD) mass load (kg/annum)	Leachate (NH3-N) mass load (kg/annum)	Leachate (Chloride) mass load kg/annum	Leachate treatment on-site	Specify type of leachate treatment	Comments
35,643.24					N/A		

Please ensure that all information reported in the landfill gas section is consistent with the Landfill Gas Survey submitted in conjunction with PRTR returns

Table 7 Landfill Gas-Landfill only

Gas Captured&Treated by LFG System m3	Power generated (MW / KWh)	Used on-site or to national grid	Was surface emissions monitoring performed during the reporting year?	Comments
263,590 m3 of CH4	126.86 MWh	national grid	No	mix of flare and engine. Surface emissions carried out in 2013.

Environmental Protection Agency

Guidance to completing the PRTR workbook

PRTR Returns Workbook

Version 1.1.19

REFERENCE YEAR	2017

1. FACILITY IDENTIFICATION

Parent Company Name	Mayo County Council
Facility Name	Derrinumera Landfill Facility
PRTR Identification Number	W0021
Licence Number	W0021-02

Classes of Activity

No.	**class_name**
-	Refer to PRTR class activities below

Address 1	Derrinumera/Drumilra (Townlands)
Address 2	Newport
Address 3	
Address 4	
	Mayo
Country	Ireland
Coordinates of Location	-7.4634 53.8497
River Basin District	IEWE
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	Killian Farrell
AER Returns Contact Email Address	kfarrell@mayococo.ie
AER Returns Contact Position	Deputy Landfill Manager
AER Returns Contact Telephone Number	09841632
AER Returns Contact Mobile Phone Number	0879155475
AER Returns Contact Fax Number	09841676
Production Volume	0.0
Production Volume Units	

Number of Installations	1
Number of Operating Hours in Year	0
Number of Employees	5
User Feedback/Comments	Site is operating as a CA site. No waste is accepted to landfill since closure in 2012. The landfill gas being experienced and utilised or flared at the site is much lower than that predicted by GASSIM and is decreasing. This is resulting in a higher emission calculation.
Web Address	

2. PRTR CLASS ACTIVITIES

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

3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)

Is it applicable?	
Have you been granted an exemption ?	
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

4. WASTE IMPORTED/ACCEPTED ONTO SITE Guidance on waste imported/accepted onto site

Do you import/accept waste onto your site for on-site treatment (either recovery or disposal activities) ?	

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

4.1 RELEASES TO AIR

Link to previous years emissions data

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO AIR					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD				QUANTITY		
			Method Used		Flare/Engine			
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
01	**Methane (CH4)**	M	OTH	Calculated from table below	443650.68	443650.68	0.0	0.0
03	Carbon dioxide (CO2)	C	CRM	GASSIM	1787260.6	1787260.6	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: Derrinumera Landfill Facility

Please enter summary data on the quantities of methane flared and / or utilised	**T (Total) kg/Year**	**M/C/E**	**Method Used**		**Facility Total Capacity m3 per hour**	
			Method Code	**Designation or Description**		
Total estimated methane generation (as per site model)	613806.68	C	CRM	Gassim 2.5	N/A	
Methane flared	132316.0	C	OTH	LFG survey	250.0	(Total Flaring Capacity)
Methane utilised in engine/s	37840.0	C	OTH	LFG survey	0.0	(Total Utilising Capacity)
Net methane emission (as reported in Section A above)	443650.68	C	OTH	subtraction	N/A	

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	02 01 04	No	20.0	Farm Plastic	R3	M	Weighed	Offsite in Ireland	IFFPG,Exempt	Waverly Road,.,Dublin,10,Ireland		
Within the Country	02 01 04	No	15.0	waste plastics (except packaging)	R3	M	Weighed	Offsite in Ireland	FRS ,Exempt	Derryvale,.,Roscrea Co. Tipperary,.,Ireland		
Within the Country	15 01 02	No	54.14	plastic packaging	R3	M	Weighed	Offsite in Ireland	McGraths Waste Ltd,wfp-10-0015-02	Turlough,.,Castlebar,.,Ireland		
Within the Country	15 01 10	Yes	1.11	packaging containing residues of or contaminated by dangerous substances	R1	M	Weighed	Offsite in Ireland	RILTA,W0192-02	Grants Drive,402 Greenogue Business Park rathcoole,Dublin,.,Ireland	RILTA,W0192-02,grants drive,402 greenogue Business Park rathcoole,Dublin,.,Ireland	grants drive,402 greenogue Business Park rathcoole,Dublin,.,Ireland
Within the Country	16 01 03	No	8.5	end-of-life tyres	R5	M	Weighed	Offsite in Ireland	Midlands scrap metal,WFP-TN-11003-02	Annagh,.,Birr co Offaly,.,Ireland		
Within the Country	16 01 07	Yes	0.82	oil filters	R9	M	Weighed	Offsite in Ireland	RILTA,W0192-02	Grants Drive,402 Greenogue Business Park rathcoole,Dublin,.,Ireland	ENVA,W0184-01,Clonminam Industrial estate,.,Portlaoise Co. Laois,.,Ireland	.,.,.,.,Ireland
To Other Countries	16 05 04	Yes	0.64	gases in pressure containers (including halons) containing dangerous substances	R4	M	Weighed	Abroad	ENVA,W0184-01	Clonminam Industrial Estate,.,Portlaoise Co.Laois,.,Ireland	Recyfuel SA,BE 459735458,Zoning Industrial dHein,.,Engis,B4480,Belgium	.,.,.,.,Belgium
Within the Country	17 08 02	No	4.78	gypsum-based construction materials other than those mentioned in 17 08 01	R5	M	Weighed	Offsite in Ireland	McGraths Waste Ltd,wfp-10-0015-02	Turlough,.,Castlebar,.,Ireland		
Within the Country	19 07 03	No	30873.0	landfill leachate other than those mentioned in 19 07 02	D9	M	Weighed	Offsite in Ireland	Rathroeen landfill site,W0067-02	Killala Road,.,Ballina Co.Mayo,.,Ireland		
Within the Country	19 07 03	No	4770.2	landfill leachate other than those mentioned in 19 07 02	D9	M	Weighed	Offsite in Ireland	Swinford WWTP,D0068-01 (Applied)	Swinford ,.,Co.Mayo,.,Ireland		
Within the Country	20 01 01	No	128.86	paper and cardboard	R3	M	Weighed	Offsite in Ireland	Bourke Waste,wfp/mo/08/0004/01	Clogher,.,Westport,.,Ireland		
Within the Country	20 01 01	No	100.28	paper and cardboard	R3	M	Weighed	Offsite in Ireland	McGraths Waste Ltd,wfp-10-0015-02	Turlough,.,Castlebar,.,Ireland		
Within the Country	20 01 02	No	67.94	glass	R5	M	Weighed	Offsite in Ireland	Rehab Recycling,03//02	Ballymount,.,Dublin,.,Ireland		
Within the Country	20 01 02	No	21.54	glass	R5	M	Weighed	Offsite in Ireland	Midlands scrap metal,WFP-TN-11003-02	Annagh,.,Birr co Offaly,.,Ireland		
Within the Country	20 01 10	No	23.09	clothes	R3	M	Weighed	Offsite in Ireland	Textile Recycling Ltd,WPR - 014	.,Unit 504A Greenogue Business Park Rathcoole,Dublin,24,Ireland		
Within the Country	20 01 21	Yes	0.806	fluorescent tubes and other mercury-containing waste	R4	M	Weighed	Offsite in Ireland	KMK metal,W0113-02	Cappincur Industrial estate,Daingean Road,Tullamore Co. Offaly,.,Ireland	KMK metal,W0113-02,Cappincur Industrial estate Daingean road,.,Tullamore Co. Offaly,.,Ireland	.,.,.,.,Ireland
Within the Country	20 01 23	Yes	19.349	discarded equipment containing chlorofluorocarbons	R4	M	Weighed	Offsite in Ireland	KMK metal,W0113-02	Cappincur Industrial estate,Daingean Road,Tullamore Co. Offaly,.,Ireland	KMK metal,W0113-02,Cappincur Industrial estate Daingean road,.,Tullamore Co. Offaly,.,Ireland	.,.,.,.,Ireland
Within the Country	20 01 25	No	0.98	edible oil and fat	R3	M	Weighed	Offsite in Ireland	Frylite,CW227	Kilcolgan,.,Galway,.,Ireland		

Within the Country	20 01 26	Yes	8.54	oil and fat other than those mentioned in 20 01 25	R9	M	Weighed	Offsite in Ireland	RILTA,W0192-02	Grants Drive,402 Greenogue Business Park rathcoole,Dublin,.,Ireland	ENVA,W0184-01,Clonminam Industrial estate,.,Portlaoise Co. Laois,.,Ireland	.,.,.,.,Ireland	
To Other Countries	20 01 27	Yes	7.58	paint, inks, adhesives and resins containing dangerous substances	R1	M	Weighed	Abroad	Ecosafe systems(SRCL),W0054-02	Unit 1A Allied Industrial Estate Kylemore Road,.,Dublin ,10,Ireland	Recyfuel SA,BE 459735458,Zoning Industrial dHein,.,Engis,B4480,Belgium	.,.,.,.,Belgium	
Within the Country	20 01 33	Yes	3.96	batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries	R4	M	Weighed	Offsite in Ireland	RILTA,W0192-02	Grants Drive,402 Greenogue Business Park rathcoole,Dublin,.,Ireland	RILTA,W0192-02,grants drive,402 greenogue Business Park rathcoole,Dublin,.,Ireland	grants drive,402 greenogue Business Park rathcoole,Dublin,.,Ireland	
Within the Country	20 01 33	Yes	1.38	batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries	R4	M	Weighed	Offsite in Ireland	KMK metal,W0113-02	Cappincur Industrial estate,Daingean Road,Tullamore Co. Offaly,.,Ireland	KMK metal,W0113-02,Cappincur Industrial estate Daingean road,.,Tullamore Co. Offaly,.,Ireland	.,.,.,.,Ireland	
Within the Country	20 01 34	No	1.56	batteries and accumulators other than those mentioned in 20 01 33	R4	M	Weighed	Offsite in Ireland	KMK metal,W0113-02	Cappincur Industrial estate,Daingean Road,Tullamore Co. Offaly,.,Ireland	KMK metal,W0113-02,Cappincur Industrial estate Daingean road,.,Tullamore Co. Offaly,.,Ireland	.,.,.,.,Ireland	
Within the Country	20 01 36	No	49.734	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	R4	M	Weighed	Offsite in Ireland	KMK metal,W0113-02	Cappincur Industrial estate,Daingean Road,Tullamore Co. Offaly,.,Ireland			
Within the Country	20 01 36	No	35.701	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	R4	M	Weighed	Offsite in Ireland	KMK metal,W0113-02	Cappincur Industrial estate,Daingean Road,Tullamore Co. Offaly,.,Ireland			
Within the Country	20 01 36	No	87.769	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	R4	M	Weighed	Offsite in Ireland	KMK metal,W0113-02	Cappincur Industrial estate,Daingean Road,Tullamore Co. Offaly,.,Ireland			
Within the Country	20 01 38	No	273.5	wood other than that mentioned in 20 01 37	R13	M	Weighed	Offsite in Ireland	Barna Waste,W0106-02	Carrowbrowne Headford Road ,.,Galway,.,Ireland			
Within the Country	20 01 39	No	41.92	plastics	R3	M	Weighed	Offsite in Ireland	Barna Waste,W0106-02	Carrowbrowne Headford Road ,.,Galway,.,Ireland			
Within the Country	20 01 40	No	138.0	metals	R4	M	Weighed	Offsite in Ireland	Galway Metal,WFP-11-G-0005-01	Oranmore,.,Galway,.,Ireland			
Within the Country	20 01 40	No	16.14	metals	R4	M	Weighed	Offsite in Ireland	McGraths Waste Ltd,wfp-10-0015-02	Turlough,.,Castlebar,.,Ireland			
Within the Country	20 02 01	No	29.68	biodegradable waste	R3	M	Weighed	Offsite in Ireland	Barna Waste,W0106-02	Carrowbrowne Headford Road ,.,Galway,.,Ireland			
Within the Country	20 03 01	No	211.84	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	Barna Waste,W0106-02	Carrowbrowne Headford Road ,.,Galway,.,Ireland			
Within the Country	20 03 01	No	975.66	mixed municipal waste	D5	M	Weighed	Offsite in Ireland	McGraths Waste Ltd,wfp-10-0015-02	Turlough,.,Castlebar,.,Ireland			
To Other Countries	20 01 31	Yes	0.08	cytotoxic and cytostatic medicines	R1	M	Weighed	Abroad	Ecosafe systems(SRCL),W0054-02	Unit 1A Allied Industrial Estate Kylemore Road,.,Dublin ,10,Ireland	Recyfuel SA,BE 459735458,Zoning Industrial dHein,.,Engis,B4480,Belgium	.,.,.,.,Belgium	

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

Environmental Protection Agency

A survey of landfill sites to determine the quantity of methane flared and or recovered in utilisation plants for 2017

Please choose from the drop down menu the license number for your site	W0021
Please choose from the drop down menu the name of the landfill site	Derrinumera Landfill Facility
Please enter the number of flares operational at your site in 2017	1
Please enter the number of engines operational at your site in 2017	1
Total methane flared	132,316 kg/year
Total methane utilised in engines	37,840 kg/year

Please note that the closing date for reciept of completed surveys is 31/03/2018

Introduction

The Office of Environmental Sustainability (OES) of the Environmental Protection Agency acts as the inventory agency in Ireland with responsibility for compiling and reporting national greenhouse gas inventories to the European Commission and the United Nations Framework Convention on Climate Change. In addition to meeting international commitments Ireland's national greenhouse gas inventory informs national agencies and Government departments as they face the challenge to curb emissions and meet Ireland's emission reduction targets under the Effort Sharing Decision (No. 406/2009/EC). The national inventory also informs data suppliers, making them aware of the importance of their contributions to the inventory process and a means of identifying areas where input data may be improved.

It is on this basis that the Environmental Protection Agency is asking landfill operators to partake in this survey so that the most uptodate information on methane flaring and recovery in utilisation plants at landfills sites is used in calculating the contribution of the landfill sector to national greenhouse gas emissions

The Environmental Protection Agency wishes to thank you for partaking in this survey. If you have any questions about the survey and how to complete it please view the "Help sheet" worksheet. If however, your query is not answered by viewing the "Help sheet" worksheet please contact:
LFGProject@epa.ie

Once completed please send the completed file as an attachment clearly stating the name and or license number of the landfill site (e.g. W000 Xanadu landfill_2017) to:
LFGProject@epa.ie

	to be filled in by licensee		calculated by spreadsheet	

Flare No. 1

Flare type ?	Organics SC25	**If "other" enter flare description here**	
Is the flare an open or enclosed flare ?	Enclosed	**Rated flare capacity ?**	250 **m3/hr**
Month /year comissioned ?	July 2001		
Month decomissioned if decomissioned in 2017 ?	Select		
What is the function of the flare ?	Back-up to engines	**If "other" enter flare function here**	

Monthly	Method M/C/E	Runtime days/month	Runtime hrs/day	Downtime hrs	Total runtime hrs/month	Average Inlet Pressure (mbg)	Average Inlet Temp ◦ C	Average Flow Rate (m^3/hr)	Average CH_4 %v/v	Average CO_2 %v/v	Average O_2 %v/v	Combustion efficiency (%)	Total CH_4 m^3	Total CH_4 kgs
January	MCE	31	24.0	265.0	479	-105	10	50	50.00	30.00	1.00	98.0	11,736	7,263
February	MCE	28	24.0	100.0	572	-105	10	50	50.00	30.00	1.00	98.0	14,014	8,673
March	MCE	31	24.0	185.0	559	-105	10	50	50.00	30.00	1.00	98.0	13,696	8,476
April	MCE	30	24.0	203.0	517	-105	10	50	50.00	30.00	1.00	98.0	12,667	7,839
May	MCE	31	24.0	149.0	595	-85	10	50	33.00	27.00	1.00	98.0	9,621	6,086
June	MCE	30	24.0	181.0	539	-65	10	50	60.00	33.00	1.00	98.0	15,847	10,239
July	MCE	31	24.0	53.0	691	-38	10	50	60.00	29.40	1.00	98.0	20,315	13,501
August	MCE	31	24.0	77.0	667	-38	10	50	60.00	29.40	1.00	98.0	19,610	13,032
September	MCE	30	24.0	0.0	720	-38	10	50	60.00	29.40	1.00	98.0	21,168	14,067
October	MCE	31	24.0	0.0	744	-38	10	50	60.00	29.40	1.00	98.0	21,874	14,536
November	MCE	30	24.0	0.0	720	-38	10	50	60.00	29.40	1.00	98.0	21,168	14,067
December	MCE	31	24.0	0.0	744	-38	10	50	60.00	29.40	1.00	98.0	21,874	14,536
Total					7,547								203,588	132,316

Please note: Only fill the "Yearly" table if data is not availabe or cannot be calculated nor estimated on a monthly basis

Yearly	Method M/C/E	Runtime days/year	Runtime hrs/day	Downtime hrs	Total runtime hrs/year	Average Inlet Pressure (mbg)	Average Inlet Temp ◦ C	Average Flow Rate m^3/hr	Average CH_4 %v/v	Average CO_2 %v/v	Average O_2 %v/v	Combustion efficiency (%)	Total CH_4 m^3	Total CH_4 kgs
2017					0		10					98.0	0	0

	to be filled in by licensee		calculated by spreadsheet	

Engine No. 1

Engine type ? Other — **If "other" enter engine description here**

Month /year comissioned ? November 2014

Month decomissioned if decomissioned in 2017 ? Select

Monthly	Method M/C/E	Runtime days/month	Runtime hrs/day	Downtime hrs	Total runtime hrs/month	Average Inlet Pressure (mbg)	Average Inlet Temp ◦C	Average Flow Rate (m^3/hr)	Average CH_4 %v/v	Average CO_2 %v/v	Average O_2 %v/v	Combustion efficiency (%)	Total CH_4 m^3	Total CH_4 kgs
January	MCE	31	24	479	265	-105	10	100	50.00	30.00	1.00	98.0	12,985	8,036
February	MCE	28	24	572	100	-105	10	100	50.00	30.00	1.00	98.0	4,900	3,033
March	MCE	31	24	559	185	-105	10	100	50.00	30.00	1.00	98.0	9,065	5,610
April	MCE	30	24	517	203	-105	10	100	50.00	30.00	1.00	98.0	9,947	6,156
May	MCE	31	24	595	149	-85	10	100	33.00	27.00	1.00	98.0	4,819	3,048
June	MCE	30	24	539	181	-65	10	100	60.00	33.00	1.00	98.0	10,643	6,877
July	MCE	31	24	691	53	-38	10	100	60.00	29.40	1.00	98.0	3,116	2,071
August	MCE	31	24	667	77	-38	10	100	60.00	29.40	1.00	98.0	4,528	3,009
September	MCE	30	24	720	0	-38	10	100	60.00	29.40	1.00	98.0	0	0
October	MCE	31	24	744	0	-38	10	100	60.00	29.40	1.00	98.0	0	0
November	MCE	30	24	720	0	-38	10	100	60.00	29.40	1.00	98.0	0	0
December	MCE	31	24	744	0	-38	10	100	60.00	29.40	1.00	98.0	0	0
Total					1,213								60,002	37,840

Please note: Only fill the "Yearly" table if data is not availabe or cannot be calculated nor estimated on a monthly basis

Yearly	Method M/C/E	Runtime days/year	Runtime hrs/day	Downtime hrs	Total runtime hrs/year	Average Inlet Pressure (mbg)	Average Inlet Temp ◦C	Average Flow Rate m^3/hr	Average CH_4 %v/v	Average CO_2 %v/v	Average O_2 %v/v	Combustion efficiency (%)	Total CH_4 m^3	Total CH_4 kgs
2017					0	Select	10					98.0	0	0