

Facility Information Summary	
AER Reporting Year	2015
Licence Register Number	W0021-02
Name of site	Derrinnumera 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
<p>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.</p> <p style="text-align: center;">Landfill closed since 2012, operating as a Civic Amenity site. No exceedances of licence limits. One non-compliance for completion of the Groundwater assesement which is currently being prepared by Consultants.</p>	

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.

Killian Farrell_____	23/3/16_____
Signature	Date
Group/Facility deputy manager (or nominated, suitably qualified and experienced deputy)	

AIR-summary template Lic No: W0021-02 Year: 2015

Answer all questions and complete all tables where relevant

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	Additional information
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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	
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3 Was all monitoring carried out in accordance with EPA guidance [Basic air monitoring checklist](#) note AG2 and using the basic air monitoring checklist?

[AGN2](#)

SELECT	
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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 thereof	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: 2015
Continuous Monitoring		

4 Does your site carry out continuous air emissions monitoring?
 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

6 Do you have a proactive service agreement for each piece of continuous monitoring equipment?

7 Did your site experience any abatement system bypasses? If yes please detail them in table A3 below

Table A2: Summary of average emissions -continuous monitoring

Emission reference no:	Parameter/ Substance	ELV in licence or any revision thereof	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

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	Solvent regulations	Please refer to linked solvent regulations to complete table 5 and 6
Total VOC Emission limit value		

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 thereof	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.	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

2015

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	
Yes	

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

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	1	mg/L	SELECT	
SW1	upstream		Suspended Solids mg/l	average of all results		N/A	9.75	mg/L		
SW1	upstream		pH	average of all results		N/A	4.73			Located in blanket peat, always shows low Ph.
SW1	upstream		Conductivity @20C uS/cm	average of all results		N/A	126.15	µS/cm @20oC		
SW1	upstream		Ammonia as NH3-N mg/l	average of all results		N/A	0.03	mg/L		
SW1	upstream		Total Phosphorus as P mg/l	average of all results		N/A	0.0675	mg/L		
SW1	upstream		Dissolved Oxygen (%)	average of all results		N/A	77.49			
SW1	upstream		Orthophosphate as PO4-P mg/l	average of all results		N/A	0.01125	mg/L		
SW1	upstream		Dissolved Oxygen (mg/l)	average of all results		N/A	7.635	mg/L		
SW2	downstream		BOD mg/l	average of all results		N/A	1	mg/L		
SW2	downstream		Suspended Solids mg/l	average of all results		N/A	7	mg/L		
SW2	downstream		pH	average of all results		N/A	6.59			
SW2	downstream		Conductivity @20C uS/cm	average of all results		N/A	220.12	µS/cm @20oC		
SW2	downstream		Ammonia as NH3-N mg/l	average of all results		N/A	0.70	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	77.22			
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	7.65	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 2015

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

4 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 thereof ^{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

Continuous monitoring

5 Does your site carry out continuous emissions to water/sewer monitoring?

No	Additional Information
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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	
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7 Do you have a proactive service contract for each piece of continuous monitoring equipment on site?

SELECT	
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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 testing

dropdown menu click to see options

Additional information

- 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)
- 1 Please provide integrity testing frequency period
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)
 - 2 How many bunds are on site?
 - 3 How many of these bunds have been tested within the required test schedule?
 - 4 How many mobile bunds are on site?
 - 5 Are the mobile bunds included in the bund test schedule?
 - 6 How many of these mobile bunds have been tested within the required test schedule?
 - 7 How many sumps on site are included in the integrity test schedule?
 - 8 How many of these sumps are integrity tested within the test schedule?
- Please list any sump integrity failures in table B1**
- 9 Do all sumps and chambers have high level liquid alarms?
 - 10 If yes to Q11 are these failsafe systems included in a maintenance and testing programme?
 - 11 Is the Fire Water Retention Pond included in your integrity test programme?

Yes	
3 years	
No	
6	
4	
2	
No	Will be tested in 2016.
1	
0	
0	
Yes	
No	
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		Aug-13	Yes	Pass			Aug-16	
Tank 2	reinforced concrete		leachate	450m3		Hydraulic test		Aug-13	Yes	Pass			Aug-16	
Tank 3	reinforced concrete		leachate	450m3		Hydraulic test		Aug-13	Yes	Pass			Aug-16	
Chemstore	prefabricated	metal	household haz material										Aug-16	
Recirculation tank cell 1	prefabricated	plastic	leachate	2.5m3		Other (please specify)	manufacterers		Yes				Aug-16	
Recirculation tank cell 2	prefabricated	plastic	leachate	2.5m3		SELECT	manufacterers		No	SELECT		SELECT	Aug-16	
	SELECT					SELECT			SELECT	SELECT		SELECT		

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

- 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](#)
- 15 Are channels/transfer systems to remote containment systems tested?
 - 17 Are channels/transfer systems compliant in both integrity and available volume?

Yes	
No	
N/A	

Pipeline/underground structure testing

- 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 within the integrity test period as specified**
- 1 Please provide integrity testing frequency period
- *please note integrity testing means water tightness testing for process and foul pipelines (as required under your licence)

No	
SELECT	

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: 2015
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				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 Groundwater Monitoring Report (link in cell G8) and submit separately through ALDER as a licensee return AND answer questions 5-12 below. template	SELECT			GW report being completed at present which will establish GTV for the site.
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

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 is being completed at present and will be submitted in Q1 2016.

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
	MW1A	pH Units	accredited lab	quarterly	7	6.875	ph			No
	MW1A	Conductivity @20C uS/cm	accredited lab	quarterly	670	580.5	us/cm			No
	MW1A	Ammonia as NH3-N mg/l	accredited lab	quarterly	0.093	0.06925	mg/l			No
	MW1A	Total Phosphorus as P mg/l	accredited lab	quarterly	0.12	0.07	mg/l			No
	MW1A	Dissolved Oxygen (%)	accredited lab	quarterly	69.8	39.8	%			No

Groundwater/Soil monitoring template			Lic No:	W0021-02	Year	2015	
MW1A	Orthophosphate as PO4-P mg/l	accredited lab	quarterly	0.012	0.0105	mg/l	No
MW1A	Dissolved Oxygen (mg/l)	accredited lab	quarterly	6.87	3.835	mg/l	No
MW1A	Potassium, total mg/l	accredited lab	quarterly	8	4.5	mg/l	No
MW1A	TON as N mg/l	accredited lab	quarterly	0.163	0.12125	mg/l	No
MW1A	Iron, total ug/l	accredited lab	quarterly	1654	1654	ug/l	No
MW1A	TOC mg/L	accredited lab	quarterly	2.8	2.3375	mg/l	No
MW1A	Sodium, total mg/L	accredited lab	quarterly	22	19.5	mg/l	No
MW1A	Chloride mg/L	accredited lab	quarterly	31.3	24.4	mg/l	No
MW1A	Manganese, total ug/l	accredited lab	Annual	651	651	ug/l	No
MW1A	Zinc, total ug/l	accredited lab	Annual	5	5	ug/l	No
MW1A	Chromium, total ug/l	accredited lab	Annual	0.5	0.5	ug/l	No
MW1A	Calcium, total mg/L	accredited lab	Annual	161	161	mg/l	No
MW1A	Boron ug/l	accredited lab	Annual	25	25	ug/l	No
MW1A	Nickel, total ug/l	accredited lab	Annual	3	3	ug/l	No
MW1A	Lead, total ug/l	accredited lab	Annual	3	3	ug/l	No
MW1A	Cadmium, total ug/l	accredited lab	Annual	0.5	0.5	ug/l	No
MW1A	Mercury ug/l	accredited lab	Annual	0.05	0.05	ug/l	No
MW1A	Total Coliforms (Filtration) (Environmental Waters) cfu/100ml	accredited lab	Annual	10	10	cfu/100ml	No
MW1A	Alkalinity, total mg/L CaCo3	accredited lab	Annual	321	321	mg/l	No
MW1A	Copper, total ug/l	accredited lab	Annual	1	1	ug/l	No
MW1A	Cyanide (Total) ug/l	accredited lab	Annual	0.009	0.009	ug/l	No
MW1A	Residue on Evaporation mg/L	accredited lab	Annual	400	400	mg/l	No
MW1A	Magnesium, total mg/L	accredited lab	Annual	14	14	mg/l	No
MW1A	Faecal Coliforms (Filtration) cfu/100ml	accredited lab	Annual	10	10	cfu/100ml	No
MW1A	Sulphate mg/L	accredited lab	Annual	23.1	23.1	mg/l	No

Groundwater/Soil monitoring template Lic No: W0021-02 Year 2015

MW1A	Fluoride mg/L	accredited lab	Annual	0.1	0.1	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

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
	MW24	pH Units	accredited lab	quarterly	6.6	6.55	ph			No
	MW24	Conductivity @20C uS/cm	accredited lab	quarterly	3100	2362.5	us/cm			No
	MW24	Ammonia as NH3-N mg/l	accredited lab	quarterly	207	106	mg/l			No
	MW24	Total Phosphorus as P mg/l	accredited lab	quarterly	0.68	0.4525	mg/l			No
	MW24	Dissolved Oxygen (%)	accredited lab	quarterly	28.2	19.925	%			No
	MW24	Orthophosphate as PO4-P mg/l	accredited lab	quarterly	0.01	0.01	mg/l			No
	MW24	Dissolved Oxygen (mg/l)	accredited lab	quarterly	2.68	2.0125	mg/l			No
	MW24	Potassium, total mg/l	accredited lab	quarterly	64	47	mg/l			No
	MW24	TON as N mg/l	accredited lab	quarterly	0.1	0.1	mg/l			No
	MW24	Iron, total ug/l	accredited lab	quarterly	75690	75690	ug/l			No
	MW24	TOC mg/L	accredited lab	quarterly	83.2	76.575	mg/l			No
	MW24	Sodium, total mg/L	accredited lab	quarterly	322	284.75	mg/l			No
	MW24	Chloride mg/L	accredited lab	quarterly	468	430.5	mg/l			No
	MW24	Manganese, total ug/l	accredited lab	Annual	7752	7752	ug/l			No
	MW24	Zinc, total ug/l	accredited lab	Annual	64	64	ug/l			No
	MW24	Chromium, total ug/l	accredited lab	Annual	12	12	ug/l			No
	MW24	Calcium, total mg/L	accredited lab	Annual	438	438	mg/l			No
	MW24	Boron ug/l	accredited lab	Annual	204	204	ug/l			No
	MW24	Nickel, total ug/l	accredited lab	Annual	17	17	ug/l			No
	MW24	Lead, total ug/l	accredited lab	Annual	8	8	ug/l			No
	MW24	Cadmium, total ug/l	accredited lab	Annual	0.5	0.5	ug/l			No

Groundwater/Soil monitoring template Lic No: W0021-02 Year 2015

MW24	Mercury ug/l	accredited lab	Annual	0.05	0.05	ug/l			No
MW24	Total Coliforms (Filtration) (Environmental Waters) cfu/100ml	accredited lab	Annual	0	0	cfu/100ml			No
MW24	Alkalinity, total mg/L CaCo3	accredited lab	Annual	1216	1216	mg/l			No
MW24	Copper, total ug/l	accredited lab	Annual	2	2	ug/l			No
MW24	Cyanide (Total) ug/l	accredited lab	Annual	0.009	0.009	ug/l			No
MW24	Residue on Evaporation mg/L	accredited lab	Annual	2008	2008	mg/l			No
MW24	Magnesium, total mg/L	accredited lab	Annual	15	15	mg/l			No
MW24	Faecal Coliforms (Filtration) cfu/100ml	accredited lab	Annual	10	10	cfu/100ml			No
MW24	Sulphate mg/L	accredited lab	Annual	5	5	mg/l			No
MW24	Fluoride mg/L	accredited lab	Annual	0.1	0.1	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 [Guidance on the Management of Contaminated Land and Groundwater at EPA Licensed Sites \(EPA 2013\)](#). (see the link in G31)

**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) [Groundwater regulations](#) [Drinking water \(private supply\) standards](#) [Drinking water \(public supply\) standards](#) [Interim Guideline Values \(IGV\)](#) [Surface water EQS](#) [GTV's](#)

Groundwater/Soil monitoring template

Lic No:

W0021-02

Year

2015

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

[Click here to access EPA guidance on Environmental Liabilities and Financial provision](#)

			Commentary
1	ELRA initial agreement status	Submitted and not agreed by EPA;	
2	ELRA review status	Review required and 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	Environmental Impairment Liability insurance	
7	Financial provision for ELRA expiry date	Enter expiry date	not agreed yet
8	Closure plan initial agreement status	Closure plan submitted and not 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 place for final closure

Environmental Management Programme/Continuous Improvement Programme template Lic No: W0021-02 Year 2015

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 g	100	general maintenance work car	Individual	Improved Environmental Management Practices
Groundwater protection	Comply with licence by com	90	Contract in place with consult	Individual	Increased compliance with licence conditions
SELECT		SELECT		SELECT	SELECT

Noise monitoring summary report Lic No: W0021-02 Year 2015

- 1 Was noise monitoring a licence requirement for the AER period?
If yes please fill in table N1 noise summary below
- 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](#)
- 3 Does your site have a noise reduction plan
- 4 When was the noise reduction plan last updated?
- 5 Have there been changes relevant to site noise emissions (e.g. plant or operational changes) since the last noise survey?

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 <u>site</u> 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?

** please explain the reason for not taking action/resolution of noise issues?
Any additional comments? (less than 200 words)

- 1 When did the site carry out the most recent energy efficiency audit? Please list the recommendations in table 3 below
- 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
- 3 Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional information

[SEAI - Large Industry Energy Network \(LIEN\)](#)

Additional information	
Enter date of audit	
No	
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)	159.402	160.996		
Total Energy Generated (MWHrs)				
Total Renewable Energy Generated (MWHrs)	87	785		
Electricity Consumption (MWHrs)				
Fossil Fuels Consumption:				
Heavy Fuel Oil (m3)	0			
Light Fuel Oil (m3)	4.9343	0.79		
Natural gas (m3)	0			
Coal/Solid fuel (metric tonnes)	0			
Peat (metric tonnes)	0			
Renewable Biomass	0			
Renewable energy generated on site	87MWhrs	785MWhrs		

* 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 ³ yr):	Volume used i.e not discharged to environment e.g. released as steam m3/yr	Unaccounted for Water:
Groundwater							
Surface water							
Public supply							
Recycled water							
Total							

* 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)					
Non-Hazardous (Tonnes)					

Resource Usage/Energy efficiency summary	Lic No: W0021-02	Year	2015
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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					

WASTE SUMMARY	Lic No:	W0021-02	Year	2015
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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

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

1 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)

Licensed annual tonnage limit for your site (total tonnes/annum)	EWC code	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	0	Landfill Closed

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	Lined disposal area occupied by waste	Unlined area
										SELECT UNIT	SELECT UNIT	SELECT UNIT
N/A	circa 1974	Apr-12	No	Public	Non Hazardous	Ceased	No	No	No			

WASTE SUMMARY	Lic No:	W0021-02	Year	2015
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Table 4 Environmental monitoring-landfill only [Landfill Manual-Monitoring Standards](#)

Was meteorological 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	No	No	No	No	GW report being completed in Q1 2016 with trigger levels etc.

.+ 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
41333	1301.99	4102.3	4383.36	5951.95	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
441014 m3 CH4	785MW	national grid	No	mix of flare and engine. Surface emissions carried out in 2013.



[Guidance to completing the PRTR workbook](#)

PRTR Returns Workbook

Version 1.1.19

REFERENCE YEAR	2015
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1. FACILITY IDENTIFICATION

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

Classes of Activity

No.	class_name
-	Refer to PRTR class activities below

Address 1	Derrinmera/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	098-41632
AER Returns Contact Mobile Phone Number	087-9155475
AER Returns Contact Fax Number	098-41676
Production Volume	0.0
Production Volume Units	0
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	5
User Feedback/Comments	Methane emissions appear to have increased from 2014. The GASSIM model estimates seem to be high compared to what is being experienced on-site where both quantity and quality of LFG are diminishing. The engine is run at as a high a rate possible and the flare is used for backup either when engine is off for service/breakdown or the gas is not sufficient to run it.
Web Address	n/a

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?	No
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

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO AIR					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
No. Annex II	Name	M/C/E	Method Used		Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0
01	Methane (CH4)	C	OTH	Calculated from flare/engine	480252.0	480252.0	0.0	0.0
03	Carbon dioxide (CO2)	M	CRM	GASSIM	2210542.9	2210542.9	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			
No. Annex II	Name	M/C/E	Method Used		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			
Pollutant No.	Name	M/C/E	Method Used		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:	Derrinnumera 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	
	Total estimated methane generation (as per site model)	759176.35	M	CRM	Gassim 2.5	N/A
	Methane flared	43972.0	C	oth	Bernard Hyde spreadsheet	250.0 (Total Flaring Capacity)
	Methane utilised in engine/s	234952.0	C	oth	Bernard Hyde spreadsheet	0.0 (Total Utilising Capacity)
	Net methane emission (as reported in Section A above)	480252.0	C	oth	Calculated from flare and eng	N/A

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 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	8.0	Farm Plastic	R3	M	Weighed	Offsite in Ireland	IFFPG,Exempt Barna	Waverly Road,,Dublin,10,Irel		
Within the Country	15 01 02	No	22.0	plastic packaging	R3	M	Weighed	Offsite in Ireland	Waste,W0106-02 Barna	Headford Road Carrowbrowne		
Within the Country	15 01 02	No	16.46	plastic packaging packaging containing residues of or contaminated	R3	M	Weighed	Offsite in Ireland	Waste,W0106-02	Headford Road Grants Drive,402 Greenogue Business Park	RILTA,W0192-02,grants drive,402 greenogue Business Park	grants drive,402 greenogue Business Park
Within the Country	15 01 10	Yes	3.7	by dangerous	R1	M	Weighed	Offsite in Ireland	RILTA,W0192-02 Midlands scrap metal,WFP-TN-	rathcoole,Dublin,,Ire Annagh,,Birr co		rathcoole,Dublin,,Ire
Within the Country	16 01 03	No	7.58	end-of-life tyres	R5	M	Weighed	Offsite in Ireland		Offaly,,Ireland Grants Drive,402 Greenogue Business Park	ENVA,W0184-01,Clonminam Industrial	
Within the Country	16 01 07	Yes	0.66	oil filters gases in pressure containers (including halons) containing	R9	M	Weighed	Offsite in Ireland	RILTA,W0192-02	rathcoole,Dublin,,Ire	estate,,Portlaoise Recyfuel SA,BE	,,,,,Ireland
To Other Countries	16 05 04	Yes	1.14	dangerous gypsum-based	R4	M	Weighed	Abroad	ENVA,W0184-01 Barna	Co.Laois,,Ireland Carrowbrowne	Belgium	,,,,,Belgium
Within the Country	17 08 02	No	6.5	construction landfill leachate	R5	M	Weighed	Offsite in Ireland	Waste,W0106-02 Rathroeen landfill site,W0067-02	Headford Road Killala Road,,Ballina Co.Mayo,,Ireland		
Within the Country	19 07 03	No	32309.11	other than those landfill leachate	D9	M	Weighed	Offsite in Ireland	Swinford WWTP,D0068-01	Swinford		
Within the Country	19 07 03	No	9024.0	other than those	D9	M	Weighed	Offsite in Ireland	Waste,wfp/mo/08/0004/01	Swinford Bourke Clogher,,Westport,,Ireland		
Within the Country	20 01 01	No	149.0	paper and cardboard	R3	M	Weighed	Offsite in Ireland	McGraths Waste Ltd,wfp-10-0015-02	Rehab Ballymount,,Dublin,,Ireland		
Within the Country	20 01 01	No	99.22	paper and cardboard	R3	M	Weighed	Offsite in Ireland	Recycling,03//02 Midlands scrap metal,WFP-TN-	Annagh,,Birr co Offaly,,Ireland		
Within the Country	20 01 02	No	78.18	glass	R5	M	Weighed	Offsite in Ireland		Offaly,,Ireland		
Within the Country	20 01 02	No	10.54	glass	R5	M	Weighed	Offsite in Ireland		Unit 504A Greenogue Business Park		
Within the Country	20 01 10	No	20.42	clothes	R3	M	Weighed	Offsite in Ireland	Textile Recycling Ltd,WPR - 014	Rathcoole,Dublin,24,		
Within the Country	20 01 21	Yes	0.775	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	,,,,,Ireland
Within the Country	20 01 23	Yes	16.103	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	,,,,,Ireland
Within the Country	20 01 25	No	0.0	edible oil and fat	R3	M	Weighed	Offsite in Ireland	Frylite,CW227	Kilcolgan,,Galway,,Ireland		

Within the Country	20 01 26	Yes	5.92	oil and fat other than those mentioned in 20 01	R9	M	Weighed	Offsite in Ireland	RILTA,W0192-02	Grants Drive,402 Greenogue Business Park rathcoole,Dublin,,Ire	ENVA,W0184-01,Clonminam Industrial estate,,Portlaoise	,,,,,Ireland
To Other Countries	20 01 27	Yes	11.84	paint, inks, adhesives and resins containing dangerous substances	R1	M	Weighed	Abroad	Ecosafe systems(SRCL),W005 4-02	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	3.12	batteries and accumulators included in 16 06	R4	M	Weighed	Offsite in Ireland	RILTA,W0192-02	Grants Drive,402 Greenogue Business Park rathcoole,Dublin,,Ire	RILTA,W0192-02,grants drive,402 greenogue Business Park	grants drive,402 greenogue Business Park rathcoole,Dublin,,Ire
Within the Country	20 01 33	Yes	1.34	batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted	R4	M	Weighed	Offsite in Ireland	KMK metal,W0113-02	Road,Tullamore Co. Offaly,,Ireland	Cappincur Industrial estate,Daingean Road,Tullamore Co. Daingean road,,Tullamore	,,,,,Ireland
Within the Country	20 01 34	No	1.5	batteries and accumulators other than those mentioned in 20 01	R4	M	Weighed	Offsite in Ireland	KMK metal,W0113-02	Cappincur Industrial estate,Daingean Road,Tullamore Co. Offaly,,Ireland	Cappincur Industrial estate, Daingean road,,Tullamore	,,,,,Ireland
Within the Country	20 01 36	No	47.422	discarded electrical and electronic equipment other than those	R4	M	Weighed	Offsite in Ireland	KMK metal,W0113-02	Road,Tullamore Co. Offaly,,Ireland	Cappincur Industrial estate,Daingean	
Within the Country	20 01 36	No	29.137	discarded electrical and electronic equipment other than those	R4	M	Weighed	Offsite in Ireland	KMK metal,W0113-02	Road,Tullamore Co. Offaly,,Ireland	Cappincur Industrial estate,Daingean	
Within the Country	20 01 36	No	71.637	discarded electrical and electronic equipment other than those	R4	M	Weighed	Offsite in Ireland	KMK metal,W0113-02	Road,Tullamore Co. Offaly,,Ireland	Cappincur Industrial estate,Daingean	
Within the Country	20 01 38	No	0.0	wood other than that mentioned in	R13	M	Weighed	Offsite in Ireland	Rathroeen landfill site,W0067-02	Killala Road,,Ballina Co.Mayo,,Ireland		
Within the Country	20 01 39	No	36.18	plastics	R3	M	Weighed	Offsite in Ireland	Waste,W0106-02	Barna Carrowbrowne Headford Road		
Within the Country	20 01 40	No	112.16	metals	R4	M	Weighed	Offsite in Ireland	Galway Metal,WFP-11-G-0005-01	Barna Carrowbrowne Headford Road		
Within the Country	20 01 40	No	3.04	metals	R4	M	Weighed	Offsite in Ireland	Waste,W0106-02	Galway Metal,WFP-11-G-0005-01	Barna Carrowbrowne Headford Road	
Within the Country	20 01 40	No	19.1	metals	R4	M	Weighed	Offsite in Ireland	Galway Metal,WFP-11-G-0005-01	Barna Carrowbrowne Headford Road		
Within the Country	20 02 01	No	20.4	biodegradable waste mixed municipal	R3	M	Weighed	Offsite in Ireland	Waste,W0106-02	Rathroeen landfill site,W0067-02	Killala Road,,Ballina Co.Mayo,,Ireland	
Within the Country	20 03 01	No	1788.6	waste	D5	M	Weighed	Offsite in Ireland	Waste,W0106-02	Barna Carrowbrowne Headford Road		
Within the Country	15 01 05	No	5.86	composite packaging	R3	M	Weighed	Offsite in Ireland	Waste,W0106-02	Barna Carrowbrowne Headford Road		

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

[Link to previous years waste data](#)

[Link to previous years waste summary data & percentage change](#)

[Link to Waste Guidance](#)



A survey of landfill sites to determine the quantity of methane flared and or recovered in utilisation plants for 2015

Please choose from the drop down menu the license number for your site	<input type="text" value="W0021"/>
Please choose from the drop down menu the name of the landfill site	<input type="text" value="Derrinmera Landfill Facility"/>
Please enter the number of flares operational at your site in 2015	<input type="text" value="1"/>
Please enter the number of engines operational at your site in 2015	<input type="text" value="1"/>
Total methane flared	<input type="text" value="43,972"/> kg/year
Total methane utilised in engines	<input type="text" value="234,952"/> kg/year

Please note that the closing date for receipt of completed surveys is 31/03/2016

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 up to date information on methane flaring and recovery in utilisation plants at landfill 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_2015) to:

	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 commissioned ?	July	2001		
Month decommissioned if decommissioned in 2015 ?	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 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	115.0	629	-53	95	51.80	28.80	1.30	98.0	30,334	19,849
February	MCE	28	24.0	472.0	200	-47	98	43.60	25.50	2.20	98.0	8,332	5,486
March	MCE	31	24.0	744.0	0	-80	83	51.60	28.90	1.00	98.0	0	0
April	MCE	30	24.0	608.0	112	-77	80	51.50	28.60	1.00	98.0	4,522	2,885
May	MCE	31	24.0	722.0	22	-89	77	55.10	30.30	1.10	98.0	915	576
June	MCE	30	24.0	720.0	0	-98	85	52.80	31.20	1.00	98.0	0	0
July	MCE	31	24.0	622.0	122	-80	65	58.10	33.30	1.00	98.0	4,515	2,871
August	MCE	31	24.0	724.0	20	-80	73	52.80	31.00	1.00	98.0	750	477
September	MCE	30	24.0	710.0	10	-104	63	51.10	30.40	1.00	98.0	317	196
October	MCE	31	24.0	626.0	118	-97	60	58.30	31.60	1.00	98.0	4,045	2,526
November	MCE	30	24.0	630.0	90	-104	63	55.80	31.40	1.00	98.0	3,115	1,930
December	MCE	31	24.0	413.0	331	-103	62	57.80	32.00	1.00	98.0	11,568	7,175
Total					1,654							68,414	43,972

Please note: Only fill the "Yearly" table if data is not available 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 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
2015					0						98.0	0	0

to be filled in by licensee calculated by spreadsheet

Engine No. 1

Engine type ? **Perkins 4008**

Month /year commissioned ?

Month decomissioned if decomissioned in 2015 ?

Monthly	Method M/C/E	Runtime days/month	Runtime hrs/day	Downtime hrs	Total runtime hrs/month	Average Inlet Pressure (mbg)	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	629	115	-53	100	51.80	28.80	1.30	98.0	5,838	3,820
February	MCE	28	24	200	472	-47	100	43.60	25.50	2.20	98.0	20,168	13,279
March	MCE	31	24	0	744	-80	100	51.60	28.90	1.00	98.0	37,623	23,926
April	MCE	30	24	112	608	-77	100	51.50	28.60	1.00	98.0	30,686	19,577
May	MCE	31	24	22	722	-89	100	55.10	30.30	1.10	98.0	38,987	24,554
June	MCE	30	24	0	720	-98	100	52.80	31.20	1.00	98.0	37,256	23,235
July	MCE	31	24	122	622	-80	100	58.10	33.30	1.00	98.0	35,415	22,522
August	MCE	31	24	20	724	-80	100	52.80	31.00	1.00	98.0	37,463	23,824
September	MCE	30	24	10	710	-104	100	51.10	30.40	1.00	98.0	35,555	22,029
October	MCE	31	24	118	626	-97	100	58.30	31.60	1.00	98.0	35,766	22,330
November	MCE	30	24	90	630	-104	100	55.80	31.40	1.00	98.0	34,451	21,345
December	MCE	31	24	331	413	-103	100	57.80	32.00	1.00	98.0	23,394	14,510
Total					7,106							372,600	234,952

Please note: Only fill the "Yearly" table if data is not available 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 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
2015					0						98.0	0	0