

Facility Information Summary	
AER Reporting Year	2015
Licence Register Number	W0078-03
Name of site	Ballaghveny Landfill
Site Location	Woodville, Ballymackey, Nenagh, Co. Tipperary
NACE Code	38.2.1
Class/Classes of Activity	Waste Disposal Activities: Class 1, 2, 4, 5, 11, 12, 13. Waste Recovery Activities: Class 2, 3, 4, 10, 11, 13
National Grid Reference (6E, 6 N)	080251E 525319N
<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 <b>and an overview of compliance with your licence</b> <u>listing all exceedances of licence limits (where applicable) and what they relate to e.g. air, water, noise.</u></p>	<p>Closed landfill for non-hazardous waste. Any exceedance of licence limits are detailed in this report.</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.

<u>Louise Ryan</u>	<u>31/05/2016</u>
Signature	Date
Facility manager	
(or nominated, suitably qualified and experienced deputy)	

**AIR-summary template** Lic No: W0078-03 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

Additional information	
Yes	Flare stack emission

**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 note AG2 and using the basic air monitoring checklist? [Basic air monitoring checklist](#)

[AGN2](#)

Yes	
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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
Flare 1	Nitrogen oxides (NOx/NO2)	annual	150	No 30min mean can exceed the ELV	41.25	mg/Nm3	yes	EN 14792:2005	46.51	
Flare 1	Carbon monoxide (CO)	annual	50	No 30min mean can exceed the ELV	2.38	mg/Nm3	yes	EN 15058:2004	2.68	
Flare 1	volumetric flow	continuous	500	No 30min mean can exceed the ELV	131	Nm3/hour	yes	OTH	N/A	

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

<b>AIR-summary template</b>	Lic No:	W0078-03	Year	2015
<b>Continuous Monitoring</b>				

4 Does your site carry out continuous air emissions monitoring? No

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 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





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? Additional Information

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 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
- 2 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)
- 3 How many bunds are on site?
- 4 How many of these bunds have been tested within the required test schedule?
- 5 How many mobile bunds are on site?
- 6 Are the mobile bunds included in the bund test schedule?
- 7 How many of these mobile bunds have been tested within the required test schedule?
- 8 How many sumps on site are included in the integrity test schedule?
- 9 How many of these sumps are integrity tested within the test schedule?

Yes	
3 years	
Yes	One leachate lagoon. Four surface water lagoons.
5 lagoons	
none	Lagoons will be tested in 2016.
none	
No	
0	
0	
0	
No	Leachate lagoon has a high level pump cut off
N/A	
N/A	

**Please list any sump integrity failures in table B1**

11 Do all sumps and chambers have high level liquid alarms?

12 If yes to Q11 are these failsafe systems included in a maintenance and testing programme?

13 Is the Fire Water Retention Pond included in your integrity test programme?

**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)
	SELECT					SELECT			SELECT	SELECT		SELECT		
	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? [bundings and storage guidelines](#)

15 Are channels/transfer systems to remote containment systems tested?

16 Are channels/transfer systems compliant in both integrity and available volume?

SELECT	
SELECT	
SELECT	

**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**

2 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 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



<b>Groundwater/Soil monitoring template</b>	Lic No: W0078-03	Year: 2015
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		Comments
1	Are you required to carry out groundwater monitoring as part of your licence requirements?	yes
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 <a href="#">Groundwater monitoring template</a> Report (link in cell G8) and submit separately through ALDER as a licensee return AND answer questions 5-12 below.	yes
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
7	Please specify the proposed time frame for the remediation strategy	N/A
8	Is there a licence condition to carry out/update ELRA for the site?	yes
9	Has any type of risk assessment been carried out for the site?	yes
10	Has a Conceptual Site Model been developed for the site?	yes
11	Have potential receptors been identified on and off site?	yes
12	Is there evidence that contamination is migrating offsite?	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 interpretation as an additional section in this AER

Please enter interpretation of data here

**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
10/02/2015	GW5	Ammonia	EPA Lab	Quarterly	0.63	0.56	mg/l	0.3	trigger	no
10/02/2015	GW5	Conductivity	EPA Lab	Quarterly	671	640	µS/cm @20oC	1000	trigger	no

.+ 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
05/05/2015	GW9	Ammonia	EPA Lab	Quarterly	15	11.5	mg/l	0.3	trigger	no

Groundwater/Soil monitoring template				Lic No:	W0078-03		Year	2015		
28/10/2015	GW9	Conductivity	EPA Lab	Quarterly	1741	1262	μS/cm @20oC	1000	trigger	no
<p>*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.</p>							<p><a href="#">Groundwater monitoring template</a></p>			
<p>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)</p>							<p><a href="#">Guidance on the Management of Contaminated Land and Groundwater at EPA Licensed Sites (EPA 2013)</a></p>			
<p>**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)</p>							<p> <a href="#">Groundwater</a> <a href="#">Drinking water</a>  <a href="#">Surface</a> <a href="#">regulations</a> <a href="#">(private supply)</a> <a href="#">Drinking water (public</a> <a href="#">Interim Guideline</a>  <a href="#">water EQS</a> <a href="#">GTV's</a> <a href="#">standards</a> <a href="#">supply) standards</a> <a href="#">Values (IGV)</a> </p>			

**Groundwater/Soil monitoring template**

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**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:

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Year

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

		Commentary	
1	ELRA initial agreement status	Required but not submitted	
2	ELRA review status	Review required and not completed;	
3	Amount of Financial Provision cover required as determined by the latest ELRA	Not determined	
4	Financial Provision for ELRA status	Required but not submitted	Insurance cover in place.
5	Financial Provision for ELRA - amount of cover	€20million	
6	Financial Provision for ELRA - type	Other please specify	Pollution / Contamination Insurance Cover for pollution / contamination which arises from sudden, identifiable, unintended and unexpected occurrence up to €20million.
7	Financial provision for ELRA expiry date	N/A	
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;	The rest of the costs which amount to €13,846,671 spread over the years 2016 to 2046 will be funded through the annual landfill aftercare budget of Tipperary County Council.
11	Financial Provision for Closure - amount of cover	€13,846,671	
12	Financial Provision for Closure - type	Other please specify	The site is closed. Any further restoration or remediation work required will be covered through the TCC budget or by a loan.
13	Financial provision for Closure expiry date	N/A	

<b>Environmental Management Programme/Continuous Improvement Programme template</b>	Lic No:	W0078-03	Year	2015
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	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 Accredited to ISO14001
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

### Environmental Management Programme (EMP) report

Objective Category	Target	Status (% completed)	How target was progressed	Responsibility	Intermediate outcomes
Energy Efficiency/Utility conservation	Obtain accreditation for Energy management ISO50001	30	Environment Section of Tipperary Co Co intends to obtain this standard in 2016.	Michael Woulfe	Improved Environmental Management Practices
Additional improvements	Improve site security	ongoing	<p>Pumping and other electrical equipment onsite to be installed in secure concrete sheds with lights and alarm instead of metal containers.</p> <p>Additional CCTV cameras to be installed at the site.</p> <p>A 24hr on call security company to be assigned to the site.</p> <p>Boundary fences to be maintained in good condition.</p>	Louise Ryan Anne Peters	Increased compliance with licence conditions
Additional improvements	Obtain accreditation for combined EHS system (OHSAS18001 & ISO14001). Maintain accreditation.	100	Environment Section of Tipperary Co Co obtained these standards for a combined EHS System in 2015	Seamus O Brien	Improved Environmental Management Practices

Environmental Management Programme/Continuous Improvement Programme template				Lic No:	W0078-03	Year	2015
Groundwater protection	Establish a management system for limiting groundwater contamination.	40	A pumping trial commenced in early 2016. this identified further infrastructure required to complete the pumping trial. This infrastructure will be put in place during 2016 and the trial will resume in the winter of 2016 when groundwater levels rise. Following the completion of the pumping trial it should be possible to create a management strategy to minimise groundwater contamination.	Louise Ryan Anne Peters	Remediation of contamination on site		
SELECT		SELECT		SELECT	SELECT		

**Noise monitoring summary report** Lic No: W0078-03 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 <sub>eq</sub>	LA <sub>90</sub>	LA <sub>10</sub>	LA <sub>max</sub>	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)?
								SELECT	SELECT		SELECT

\*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?
No noise monitoring took place as the site is closed.

## Resource Usage/Energy efficiency summary

Lic No:

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## Additional information

- 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

	2009	
No		
N/A		

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)	57.888	62.511	N/A	N/A
Total Energy Generated (MWHrs)	N/A	N/A	N/A	N/A
Total Renewable Energy Generated (MWHrs)	N/A	N/A	N/A	N/A
Electricity Consumption (MWHrs)	57.888	62.511	N/A	N/A
Fossil Fuels Consumption:	N/A	N/A	N/A	N/A
Heavy Fuel Oil (m3)	N/A	N/A	N/A	N/A
Light Fuel Oil (m3)	N/A	N/A	N/A	N/A
Natural gas (m3)	N/A	N/A	N/A	N/A
Coal/Solid fuel (metric tonnes)	N/A	N/A	N/A	N/A
Peat (metric tonnes)	N/A	N/A	N/A	N/A
Renewable Biomass	N/A	N/A	N/A	N/A
Renewable energy generated on site	N/A	N/A	N/A	N/A

\* 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 <sup>3</sup> /yr):	Volume used i.e not discharged to environment e.g. released as steam m3/yr	Unaccounted for Water:
Groundwater	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface water	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Public supply	17		N/A	N/A	N/A	N/A	N/A
Recycled water	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\* 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

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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					

**Complaints and Incidents summary template** Lic No: W0078-03 Year 2015

Complaints		Additional information
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

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							
Total new complaints received during reporting year							
Total complaints closed during reporting year							
Balance of complaints end of reporting year							

**Incidents**

Additional information	
Yes	17 incidents were reported to the EPA in 2015.  The high level of incidents is due to the requirement to report an incident per location per day that a leachate level was higher than the trigger level, previously if a level was high for a number of consecutive days this would have been reported as one incident.
Have any incidents occurred on site in the current reporting year? Please list all incidents for current reporting year in Table 2 below	

\*For information on how to report and what constitutes an incident [What is an incident](#)

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 reoccurrence
26/12/2015	Trigger level reached	LS03	1. Minor	No Uncontrolled release	Other (add details)	Groundwater ingress	Normal activities	EPA	Recurring	Pumped down leachate	N/A	Complete	25/01/2016	High
09/12/2015	Monitoring equipment offline	Leachate SCADA	1. Minor	No Uncontrolled release	Other (add details)	software issue	Normal activities	EPA	Recurring	Repaired system	N/A	Complete	15/12/2015	Medium
01/03/2015	Trigger level reached	LS06	1. Minor	No Uncontrolled release	Other (add details)	Groundwater ingress	Normal activities	EPA	Recurring	Pumped down leachate	N/A	Complete	03/03/2015	High



<b>WASTE SUMMARY</b>	Lic No:	W0078-03	Year	2015
<b>SECTION A-PRTR ON SITE WASTE TREATMENT AND WASTE TRANSFERS TAB- TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES</b>		<a href="#">PRTR facility logon</a>	dropdown list click to see options	

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

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)

1 If yes please enter details in table 1 below

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

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

Additional Information

No	Site is closed.
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N/A	
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No	
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**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 <a href="#">European Waste Catalogue EWC codes</a>	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

Yes	
-----	--

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

N/A	
-----	--

6 Does your facility have relevant nuisance controls in place?

Yes	
-----	--

7 Do you have an odour management system in place for your facility? If no why?

Yes	
-----	--

8 Do you maintain a sludge register on site?

N/A	
-----	--

**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
Non-hazardous	49,000	0	129,045	

**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
Ballaghveny	1984	2011	No	Public	Non Hazardous	Temporary closure in place.	No	No	No	Cells 1 - 10A	Cells 3 - 10A	Cells 1 & 2

<b>WASTE SUMMARY</b>	Lic No:	W0078-03	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 SS3(A)(5) of WMA been submitted in reporting year	Comments
Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	

-> 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					
Phase 1		0 All capped			1 m thick cap comprising approximately 0.15 m of topsoil over 0.85 m of subsoil. No drainage layer at base of subsoil.	
Phase 2, 3 and 4		0 All capped			No Flexible Membrane Liner System incorporating Gas Collection layer. LLDPE Liner layer. SW drainage geocomposite layer. 0.85 m subsoil layer, 0.15 m topsoil layer	
		0				

\*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 (NH4) mass load (kg/annum)	Leachate (Chloride) mass load kg/annum	Leachate treatment on-site	Specify type of leachate treatment	Comments
9439.6	149.85	1399.42	1035.99	1623.61	none	N/A	Mass load sent to WWTP

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
1091333		0 N/A	Yes	

Comments on liner type





Environmental Protection Agency

[ PRTR# : W0078 | Facility Name : Ballaghveny Landfill | Filename : PRTR  
W0078\_2015.xls | Return Year : 2015 ]

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[Guidance to completing the PRTR workbook](#)

# PRTR Returns Workbook

Version 1.1.19

**REFERENCE YEAR** 2015

## 1. FACILITY IDENTIFICATION

Parent Company Name	Tipperary County Council
Facility Name	Ballaghveny Landfill
PRTR Identification Number	W0078
Licence Number	W0078-03

Classes of Activity

No.	class_name
-	Refer to PRTR class activities below

Address 1	Ballymackey
Address 2	
Address 3	
Address 4	
	Tipperary
Country	Ireland
Coordinates of Location	-7.46859 53.2333
River Basin District	IEGBNISH
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	Louise Ryan
AER Returns Contact Email Address	louisem.ryan@tipperarycoco.ie
AER Returns Contact Position	Landfill Manager
AER Returns Contact Telephone Number	087-6598692
AER Returns Contact Mobile Phone Number	087-6598692
AER Returns Contact Fax Number	n/a
Production Volume	0.0
Production Volume Units	0
Number of Installations	0
Number of Operating Hours in Year	750
Number of Employees	1
User Feedback/Comments	Variance in Release to Air can be accounted for much lower measured emission rates in 2015 compared to 2014 combined with a much lower
Web Address	www.tipperarycoco.ie

## 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?	No
If applicable which activity class applies (as per Schedule 2 of the regulations)?	
Is the reduction scheme compliance route being used?	

## 4. WASTE IMPORTED/ACCEPTED ONTO SITE

[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](#)

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**SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS**

RELEASERS TO AIR		METHOD			Please enter all quantities in this section in KGs		QUANTITY		
POLLUTANT		Method Used			Flare	Emission from Waste Body			
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	Emission Point 2	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
01	Methane (CH4)	C	OTH	Designation or Description Landgem Model & onsite flare records	0.0	382442.0	382442.0	0.0	0.0
02	Carbon monoxide (CO)	M	EN 15058:2004	EN15058:2006 NCIR by Horiba PG-250	2.62	0.0	2.62	0.0	0.0
08	Nitrogen oxides (NOx/NO2)	M	EN 14792:2005	EN14792:2006 Chemiluminescence	45.35	0.0	45.35	0.0	0.0
11	Sulphur oxides (SOx/SO2)	M	ALT	TGN 21 NDIR Absorption	41.61	0.0	41.61	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**

RELEASERS TO AIR		METHOD			Please enter all quantities in this section in KGs		QUANTITY		
POLLUTANT		Method Used			Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	
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	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)**

RELEASERS TO AIR		METHOD			Please enter all quantities in this section in KGs		QUANTITY		
POLLUTANT		Method Used			Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	
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	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:		Ballaghveny Landfill			
Please enter summary data on the quantities of methane flared and / or utilised		METHOD			Facility Total Capacity m3 per hour
T (Total) kg/Year		M/C/E	Method Code	Designation or Description	Facility Total Capacity m3 per hour
Total estimated methane generation (as per site model)	596859.0	C	OTH	Landgem	N/A
Methane flared	214417.0	C	OTH	Landgem	500.0 (Total Flaring Capacity)
Methane utilised in engine/s	0.0				0.0 (Total Utilising Capacity)
Net methane emission (as reported in Section A above)	382442.0	C	OTH	Landgem	N/A

## 4.2 RELEASES TO WATERS

[Link to previous years emissions data](#)

### SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO WATERS	
POLLUTANT	
No. Annex II	Name

\* Select a row by double-clicking on the Pollutant Name (Column B) th

### SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO WATERS	
POLLUTANT	
No. Annex II	Name

\* Select a row by double-clicking on the Pollutant Name (Column B) th

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

RELEASES TO WATERS	
POLLUTANT	
Pollutant No.	Name

\* Select a row by double-clicking on the Pollutant Name (Column B) th

**Data on ambient monitoring of storm/surface water or groundwater, conducted as part of your licence requirements, should NOT**

**Please enter all quantities in this section in KGs**

		Method Used		Emission Point 1	T (Total) KG/Year
M/C/E	Method Code	Designation or Description			
				0.0	0.0

en click the delete button

**Please enter all quantities in this section in KGs**

		Method Used		Emission Point 1	T (Total) KG/Year
M/C/E	Method Code	Designation or Description			
				0.0	0.0

en click the delete button

**Please enter all quantities in this section in KGs**

		Method Used		Emission Point 1	T (Total) KG/Year
M/C/E	Method Code	Designation or Description			
				0.0	0.0

en click the delete button

be submitted under AER / PRTR Reporting as this only concerns Releases from your facility

QUANTITY	
A (Accidental) KG/Year	F (Fugitive) KG/Year
0.0	0.0

QUANTITY	
A (Accidental) KG/Year	F (Fugitive) KG/Year
0.0	0.0

QUANTITY	
A (Accidental) KG/Year	F (Fugitive) KG/Year
0.0	0.0

4.3 RELEASES TO WASTEWATER OR SEWER

[Link to previous years emissions data](#)

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**SECTION A : PRTR POLLUTANTS**

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

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

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

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

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

#### 4.4 RELEASES TO LAND

[Link to previous years emissions data](#)

#### SECTION A : PRTR POLLUTANTS

RELEASES TO LAND	
POLLUTANT	
No. Annex II	Name

\* Select a row by double-clicking on the Pollutant Name (Column B)

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

RELEASES TO LAND	
POLLUTANT	
Pollutant No.	Name

\* Select a row by double-clicking on the Pollutant Name (Column B)

METHOD			Please enter all quantities
M/C/E	Method Used		Emission Point 1
	<a href="#">Method Code</a>	Designation or Description	
			0.0

) then click the delete button

METHOD			Please enter all quantities
M/C/E	Method Used		Emission Point 1
	<a href="#">Method Code</a>	Designation or Description	
			0.0

) then click the delete button

<b>in this section in KGs</b>	
<b>QUANTITY</b>	
T (Total) KG/Year	A (Accidental) KG/Year
0.0	0.0

<b>in this section in KGs</b>	
<b>QUANTITY</b>	
T (Total) KG/Year	A (Accidental) KG/Year
0.0	0.0



5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

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Please enter all quantities on this sheet in Tonnes

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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	Haz Waste : Address of Next Destination Facility	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		Haz Waste : Name and Licence/Permit No of Recover/Disposer	Non Haz Waste: Address of Recover/Disposer		
Within the Country	19 07 03	No	0.0 in 19 07 02	landfill leachate other than those mentioned	D8	M	Weighed	Offsite in Ireland	Thurles WWTP,D0026-01	Thurles WWTP,Thurles WWTP,Co Tipperary,..Ireland		
Within the Country	19 07 03	No	0.0 in 19 07 02	landfill leachate other than those mentioned	D8	M	Weighed	Offsite in Ireland	Kilkenny City WWTP,W0018-01	WWTP,Kilkenny ,Co. Kilkenny,..Ireland	.....,Ireland	.....,Ireland
Within the Country	19 07 03	No	2477.22 in 19 07 02	landfill leachate other than those mentioned	D8	M	Weighed	Offsite in Ireland	Limerick WWTP,D0013.01	WWTP,Bunlicky,Limerick ..,Ireland		
Within the Country	19 07 03	No	9439.6 in 19 07 02	landfill leachate other than those mentioned	D8	M	Weighed	Offsite in Ireland	Rilta Environmental Services,W0192-03	Rilta Environmental Services,Rathcoole,Dublin,..Ireland		

\* 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](#)