Facility Information Summary

Licence Register Number

AER Reporting Year

Name of site Site Location

NACE Code

Class/Classes of Activity

National Grid Reference (6E, 6 N)

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.

2017

W0059-03

Ballaghaderreen Landfill

Aghalustia Townland, Ballaghaderreen, County Roscommon

3821

Treatment and disposal of non-hazardous waste

163350 292800

The landfill site stopped accepting waste for disposal to landfill in July 2010. There were no major site activities in 2017. During 2017, there were exceedances of the Licence limits for carbon dioxide in perimeter boreholes GM202, GM203 and GM208. Annual flare monitoring and noise monitoring were not carried out in 2017; noise monitoring has not been carried out since the landfill ceased accepting waste in 2010.

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.

Niall Kennedy 27/03/2017
Signature Date

Group/Facility manager

(or nominated, suitably qualified and experienced deputy)

AIR-summary template Lic No: W0059-03 Year 2017

Answer all questions and complete all tables where relevant

Does your site have licensed air emissions? If yes please complete table A1 and A2 below for the current 1 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
	For the landfill gas flare and perimeter monitoring
	Tor the landing as hare and perimeter monitoring
Yes	boreholes as per Condition 6 of the Licence.

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

Carbon dioxide in perimeter boreholes.

Was all monitoring carried out in accordance with EPA guidance monitoring

note AG2 and using the basic air monitoring checklist? checklist

AGN2

Flare monitoring was not, however, carried out in 2017.

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

Emission		- ,	ELV in licence or any revision			Unit of	Compliant with		Annual mass	Comments -reason for change in % mass load from previous year
reference no:		Frequency of Monitorina	therof	Licence Compliance criteria	Measured value	measurement	licence limit	Method of analysis		if applicable
Perimeter			chero:		All results below	medsarement	incernee iiiiiie	Wiction of dilarysis	iodd (kg)	п аррисавис
monitoring					1.0% v/v in 2017					Method of analysis for methane
boreholes										and carbon dioxide in perimeter
GM201 - GM204										monitoring boreholes is in
and GM206 -										accordance with Site Operating
GM208	Methane (CH4)	Monthly	1.0% v/v	100 % of values < ELV		SELECT	yes	SELECT	0	Procedure SOP17.
					Maximum value					
1					3.9% v/v in 2017 (GM202, Q1).					Given that there are no
1					Exceedences of					corresponding elevated
1					1.5% v/v level					methane levels within the
1					recorded in					perimeter boreholes then
!					GM202, GM203					landfill gas is unlikely to be the
L					and GM208.					source of the carbon dioxide.
Perimeter										Elevated carbon dioxide
monitoring										concentrations could occur as a
boreholes GM201 - GM204									Cannot	result of decomposition
and GM206 -							no (if no please enter details in		calculate as	processes within the peat into which the monitoring boreholes
	Carbon dioxide (CO2)	Monthly	1.5% v/v	100 % of values < ELV		SELECT	comments box)	SELECT	flow rates not recorded.	are installed.
GIVIZU8	Carbon dioxide (CO2)	IVIOITETITY	1.5% V/V	100 % Of Values < ELV		SELECT	comments box)	SELECT	recorded.	Flow monitoring completed on
!										monthly basis - measured value
1										is average from available data.
Flare Outlet	volumetric flow	Annually	_		96	Nm3/hour	SELECT	SELECT	N/A	
	Nitrogen oxides	,	<150 mg/Nm ³		N/A - see				N/A - see	Flare emissions monitoring not
Flare Outlet	(Nox/NO2)	Annually		100 % of values < ELV	comments	SELECT	SELECT	SELECT	comments	completed in 2017.
	Total Organic Carbon (as		<10 mg/Nm ³		N/A - see				N/A - see	Flare emissions monitoring not
Flare Outlet	C)	Annually	_	100 % of values < ELV	comments	SELECT	SELECT	SELECT	comments	completed in 2017.
!			Hydrochloric							Flare emissions monitoring not
!			acid - <50							completed in 2017.
!			mg/Nm ³ >0.3		N/A - see				N/A - see	
Flare Outlet	Total acids	Annually	kg/hr	100 % of values < ELV	comments	SELECT	SELECT	SELECT	comments	
1			Hydrogen							Flare emissions monitoring not
1			fluoride - <5							completed in 2017.
1			mg/Nm ³ >0.05		N/A - see				N/A - see	
Flare Outlet	Total acids	Annually	kg/hr	100 % of values < ELV	comments	SELECT	SELECT	SELECT	comments	

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

AIR-summary template	Lic No:	W0059-03	Year	2017
Continuous Monitoring				
4 Does your site carry out continuous air emissions monitoring?		Continuous carbon monoxide monito flow outlet in Table D.7 of Licence	oring required from	
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	Yes	See Table A2		
6 Do you have a proactive service agreement for each piece of continuous monitoring equipment?	Yes			
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	No			

Emission	Parameter/ Substance		Averaging Period	Compliance Criteria	Units of	Annual Emission	Annual maximum	Monitoring	Number of ELV	Comments
reference no:					measurement			Equipment	exceedences in	
								downtime (hours)	current	
		ELV in licence or							reporting year	
		any revision therof								
						N/A	N/A	N/A	N/A	Flare emissions monitoring not
Flare Outlet	Carbon monoxide (CO)	<50 mg/Nm3	Daily	Daily average < ELV	mg/Nm3					completed in 2017.
	SELECT				SELECT					
	SELECT				SELECT					
	SELECT				SELECT					
	SELECT				SELECT					

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

Table A3: Ab	ater	nen	t syste	m by	pass r	eporting tab	le	By	pass protocol
			44.0						

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

	AIR-summary	template				Lic No:	W0059-03		Year	2017	
	Solvent	use and manageme	nt on site								
	Do you have a tota	al Emission Limit Value of o	direct and fugitive em	nissions on site? if y	es please fill out tables A4 and a	A5		No			
		ent Management Pl ssion limit value	an Summary	<u>Solvent</u> regulations	Please refer to linked solver complete table 5						
	Reporting year	Total solvent input on site (kg)	Total VOC emissions to Air from entire site (direct and fugitive)		Total Emission Limit Value (ELV) in licence or any revision therof	Compliance					
ĺ						SELECT					
I						SELECT					
	Table A5:	Solvent Mass Baland	ce summary				_				
		(I) Inputs (kg)			(O)	Outputs (kg)					
	Solvent	(I) Inputs (kg)		Solvents lost in water (kg)		Fugitive Organic Solvent (kg)			Total emission of Solvent to air (kg)		
								Total			

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER) Lic No: W0059-03 2017 Year Additional information 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 <u>only</u> need to complete table The lagoon provides buffer storage for leachate pumped from the lined cells, before it is pumped to the public sewer to discharge to W1 and or W2 for storm water analysis and visual inspections Ballaghaderreen STW. Was it a requirement of your licence to carry out visual inspections on any surface water 2 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 D.5.1 requires weekly visual inspection of surface water. Table W1 Storm water monitoring

Location reference	Location relative to site activities	PRTR Parameter	Licenced Parameter	Monitoring	ELV or trigger level in licence or any revision thereof*	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Comments
	SELECT	SELECT	SELECT			SELECT		SELECT	SELECT	
	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
NA - no					
contamination					
observed.			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 ye comment section of Table W3		ef details in the	No	NA - no ELV or trigger value for parameters monitored.
	Was all monitoring carried out in accordance with EPA				
	guidance and checklists for Quality of Aqueous Monitoring	External /Internal			
	Data Reported to the EPA? If no please detail what areas	Lab Quality	Assessment of		
4	require improvement in additional information box	checklist	results checklist	Yes	

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

Emission reference no:	Emission released to Wastewater/Se wer	Parameter/ SubstanceNote 1 volumetric flow	Type of sample	Frequency of monitoring Daily	Averaging period	ELV or trigger values in licence or any revision therof ^{Note 2}	Licence Compliance criteria No flow value shall exceed the specific limit.	measurement	Compliant with licence	Method of analysis INSTRUMENTAL METHODS	Procedural reference source Other (please specify)	Procedural reference standard number Standard Operating Procedure SOP16	Annual mass load (kg)	Comments
LS-1	Wastewater/Se wer	Volatile organic compounds (as TOC)	discrete	Frequency and method are still to be agreed with EPA		0.14 mg/l		mg/L		NA	NA		This relates to methane, which could not be selected from dropdown box.	

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

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

AER Monitoring returns summary template-WATER/WASTEWATER(SEWE	R)	Lic No:	W0059-03		Year
Continuous monitoring			Additional Informatio	n	
Does your site carry out continuous emissions to water/sewer monitoring?		monitoring at	n the Licence requires daily flow mo t a frequency 'to be agreed'. We ha ing is not classified as continuous m	ive assumed that daily	
5	No				
If yes please summarise your continuous monitoring data below in Table W4 and compare it to relevant Emission Limit Value (ELV)	its				
$6 \atop 6 \atop \text{bid continuous monitoring equipment experience downtime? If yes please record downtime in table W4 below}$	No	NA			
7 Do you have a proactive service contract for each piece of continuous monitoring equipment on site?	No	NA			
8 Did abatement system bypass occur during the reporting year? If yes please complete table W5 below	No				

Table W4: Summary of average emissions -continuous monitoring

Emission reference no:	Emission released to		ELV or trigger values in licence or any revision thereof					Equipment	Number of ELV exceedences in reporting year	Comments
	SELECT	SELECT		SELECT	SELECT	SELECT				
	SELECT	SELECT		SELECT	SELECT	SELECT				

2017

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

Table W5: Abatement system bypass reporting table

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

^{*}Measures taken or proposed to reduce or limit bypass frequency

Bund/Pipeline tes	sting template				Lic No:	W0059-03		Year	201	7				
Bund testing	I	dropdown menu cli	ck to see options				Additional information	-						
and containment struc	tures on site, in addition	ntegrity testing on bunds and con to all bunds which failed the inte ids outside the licenced testing pe	grity test-all bunding structu	res which failed including		Yes	Condition 10.4 c) of Licence							
Please provide integrit Does the site maintain "Chemstore" type unit: How many bunds are o	a register of bunds, und s and mobile bunds)	od lerground pipelines (including stor	rmwater and foul), Tanks, sur	nps and containers? (conta	ainers refers to	3 years Yes 1	Condition 3.10.5 of the Licence Leachate lagoon bund							
6 How many mobile bund 7 Are the mobile bunds i 8 How many of these mo 9 How many sumps on si 10 How many of these sur	ds are on site? included in the bund test obile bunds have been te ite are included in the int mps are integrity tested v	sted within the required test sche tegrity test schedule? within the test schedule?	dule?			0 0 SELECT NA 0 NA	Leachate lagoon bund last tested in 2016 by RPS on behalf of RCC.							
Please list any sump in	ntegrity failures in table E					Yes	High level alarms installed in pump sumps and leachate lagoon. In accordance with Site Operating							
		d in a maintenance and testing pro our integrity test programme?	ogramme?			Yes NA	Procedures. No fire water retention pond.	1						
Tabl	le B1: Summary details of	f bund /containment structure int	egrity test											
Bund/Containment structure ID	Туре	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 y
Leachate lagoon bund	other (please specify)	Granular basal support layer, BES layer, HDPE layer, geotextile protection layer and granular layer supported by geoweb on side slopes.	Leachate	Approximately 800 cubic metres	N/A: bund walls form the structure of the lagoon (i.e. it is not a bund containing a tank or similar)	Structural assessment		Last tested 16/09/2016	Yes	Pass	NA	SELECT	2019	
* Capacity required should comp	SELECT Ny with 25% or 110% containment r	rule as detailed in your licence				SELECT	Commentary	_	SELECT	SELECT		SELECT		
Has integrity testing be 15 in line with BS8007/EP		ance with licence requirements ar	nd are all structures tested	bunding and storage guidel	lines_	Yes	Lagoon integrity tested every 3 years in accordance with Licence (last carried out in 2016).							
16 Are channels/transfer	systems to remote contain	inment systems tested?				Yes	Connecting pipework to lagoon was tested following installation in 2003.							
17 Are channels/transfer	systems compliant in bot	th integrity and available volume?				Yes	Connecting pipework to lagoon was tested following installation in 2003.							
Pipeline/undergro	ound structure testing							T						
1 all underground structu 2 Please provide integrit	ures and pipelines on site y testing frequency perio	ntegrity testing* on underground e which failed the integrity test ar od itness testing of all underground p	nd all which have not been to	sted within the integrity t		No Other (please specify)	Pipework installed under CQA NA							
Table	B2: Summary details of p	pipeline/underground structures in	ntegrity 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	1		
												1		
							_							

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

Groundwater/Soil monitoring template	Lic No:	W0059-03	Year	2017		
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		Comments	
1 Are you required to carry out groundwater monitoring as part of your licence requirements:	yes	Schedule D of Licence	
2 Are you required to carry out soil monitoring as part of your licence requirements?	no		Please provide an interpretation of groundwater monitoring data in the interpretation box below or if you require
3 Do you extract groundwater for use on site? If yes please specify use in comment section	no		additional space please include a groundwater/contaminated land monitoring results interpretaion as an additional section in this AER
Do monitoring results show that groundwater generic assessment criteria such as GTVs or IGVs are exceeded or is there an upward trend in results for a substance? If yes, please complete the Groundwater Monitoring Guideline Template Report (link in cell GB) and submit separately through ALDER as a licensee return AND answer questions 5-12 below.	no	the right. The text is	April 2017 (Q1): The reported monitoring results for April 2017 from the limestone aquifer boreholes are all below the trigger levels for the site. Concentrations of ammonia in the limestone boreholes ranged between 0.042 mg/l and 2.67 mg/l, with higher concentrations recorded in some of the boreholes installed within the superficial deposits (up to 8.39mg/l, BH12) although similar results have been recorded previously. The rest of the results for the other typical landfill leachate indicator parameters (chloride, dissolved ovygen and electrical conductivity) are similar to previous results as follows: chloride concentrations within all monitored boreholes remain relatively low (all +50 mg/l); dissolved oxygen concentrations range between 2.18 mg/l and 6.8 mg/l (some results are slightly higher than the previous results) and electrical conductivity results are below 1000 µs/cm.
5 Is the contamination related to operations at the facility (either current and/or historic)	yes	Cells 1 to 5 at the site were designed and operated on the principles of 'dilute and disperse' and are therefore unlined.	May 2017 (Q2): The reported monitoring results for May 2017 from the limestone aquifer boreholes are all below the trigger levels for the site. Concentrations of ammonia in the limestone boreholes ranged between 0.042 mg/l and 2.32 mg/l, with higher concentrations recorded in some of the boreholes installed within the superficial deposits (pu to 7.57mg/l, BH12) although similar results have been recorded previously. The rest of the results for the other typical landfill leachate indicator parameters (chloride, dissolved oxygen and electrical conductivity) are similar to previous results as follows: chloride concentrations within all monitored boreholes remains relatively low [all <50 mg/l); dissolved oxygen concentrations range between 1.05 mg/l and 3.8 mg/l (slightly lower than the
Have actions been taken to address contamination issues?If yes please summarise remediation strategies proposed/undertaken for the site	yes	Capping and landfill gas/leachate management of Cells 1 to 5.	previous results) and electrical conductivity results are below 1,000 µS/cm. September 2017 (Q3): Samples were also submitted from boreholes BH3, BH04/1 and BH102 for 'list /\)I' analysis, which includes a suite of volatile organic compounds, semi-volatile organic compounds and organochlorine pesticides. All analysed parameters in this suite were below the laboratory limit of detection (BLD) in each of the
7 Please specify the proposed time frame for the remediation strategy	yes	Ongoing.	samples. The reported monitoring results for September 2017 from the limestone aquifer boreholes are all below the trigger levels for the site. Concentrations of ammonia in the limestone boreholes ranged between 0.42 mg/l
8 Is there a licence condition to carry out/update ELRA for the site?	yes	Condition 12.4.2 of the Licence.	(BH04/1) and 2.84 mg/l (BH102), with slightly lower concentrations recorded in the boreholes installed within the
9 Has any type of risk assesment been carried out for the site?	yes	Please refer to Waste Licence Review application, Enter ref: 00966rr52912 dated March 2002. Also updated Groundwater Risk Screening and Technical Assessment September 2014 produced by Amec Foster Wheeler.	superficial deposits, at between 0.166 mg/l (BH11) and 0.344 mg/l (BH3). Anmonia concentrations recorded within the boreholes installed in superficial deposits were previously higher (up to 7.57 mg/l in Q2 2017 and 8.39 mg/l in Q1 2017, both from BH12). The rest of the results for the other typical landfill leachate indicator parameters (chloride, dissolved oxygen and electrical conductivity) are similar to previous results as follows: chloride concentrations within all monitored boreholes remain relatively low (all <50 mg/l); dissolved oxygen concentrations range between 0.64 mg/l and 5.57 mg/l (some results are lower than the previous results, e.g. 2.44 mg/l to 7.0 mg/l in Q2 2017); and electrical conductivity results remain below 1,000 µ5/cm. Concentrations of total cyanide and mercury were BLD in all the sampled boreholes and concentrations of copper were BLD in all but one of the sampled boreholes. Most of the other parameters analysed were recorded at concentrations of a similar magnitude to previous results, with the notable exception being iron, where latest results were in the range of 1,600 – 5,200 µg/l vs. previous (Q2 2017) results of 290 – 47,000 µg/l. Concentrations of smost of the parameters analysed are quite similar in the limestone boreholes, with all concentrations BLD for cadminum, copper, mercury.
10 Has a Conceptual Site Model been developed for the site?	yes	Please refer to Amec Foster Wheeler's Groundwater Risk Screening and Technical Assessment dated September 2014.	chromium and cyanide in these boreholes. There were, however, several parameters where concentrations were higher in the downgradient boreholes in the limestone (BH102 and BH103) compared to the upgradient borehole (BH04/1), as follows: ammoniacal nitrogen (0.42 mg/l upgradient vs. up to 2.84 mg/l downgradient); total organic carbon (TOC) (6.81 mg/l upgradient vs. up to 7.55 mg/l downgradient); iron (3.400 µg/l upgradient vs. 5,200 µg/l in BH103); and manganese (320 µg/l upgradient vs. 2,800 µg/l in BH102). This trend was seen in the previous annual results (from Q2 2016) for TOC and manganese. The previous quarterly results (from Q2 2017) also recorded a higher concentration of ammoniacal nitrogen in one of the downstream limestone boreholes (BH103, 2.32 mg/l) compared to the upstream limestone borehole (0.129mg/l). This trend of higher concentrations of some
11 Have potential receptors been identified on and off site?	yes	Please refer to Amec Foster Wheeler's Groundwater Risk Screening and Technical Assessment dated September 2014.	parameters in the downstream limestone boreholes warrants close attention to future results as it may be indicative of impact to groundwater from the unlined part of the site. November 2017 (Q4): The reported monitoring results for November 2017 from the limestone aquifer boreholes are all below the trigger levels for the site. Concentrations of ammonia in the limestone boreholes ranged between 0.04 mg/l and 1.67 mg/l, with higher concentrations recorded in some of the boreholes installed within the superficial deposits (up to 8.64 mg/l, BH12) although similar results have been recorded previously. The rest of the results for the other typical landfill leachate indicator parameters (chloride, dissolved oxygen and electrical conductivity) are similar to previous results as follows: chloride concentrations
12 Is there evidence that contamination is migrating offsite?	yes	See interpretation box to the right. The text is lifted from the quarterly site monitoring reports produced by Amec Foster Wheeler.	within all monitored boreholes remains relatively low (all <50 mg/l); dissolved oxygen concentrations range between 1.42 mg/l and 6.82 mg/l (slightly higher than the previous results) and electrical conductivity results are below 1,000 μS/cm.

Groundwater/Soil monitoring template	Lic No:	W0059-03	Year	2017
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Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration++	Average Concentration+	unit	GTV's*		Upward trend in pollutant concentration over last 5 years of monitoring data
12 April, 30 May, 28 September, 23 November 2017	BH04/1	Ammoniacal nitrogen	Site Operating Procedure SOP 15	Quarterly	0.42	0.21	mg/l	3	0.3	no
12 April, 30 May, 28 September, 23 November 2017	BH04/1	Chloride	Site Operating Procedure SOP 15	Quarterly	33.4	32.62	mg/l	100	250	yes
12 April, 30 May, 28 September, 23 November 2017	BH04/1	тос	Site Operating Procedure SOP 15	Quarterly	6.82	6.33	mg/l	80	NA	yes

^{.+} where average indicates arithmetic mean

Table 2: Downgradient Groundwater monitoring results

Date of sampling	Sample location reference	Parameter/ Substance		Monitoring frequency	Maximum Concentration	Average Concentration	unit	GTV's*		Upward trend in yearly average pollutant concentration over last 5 years of monitoring data
12 April, 30 May, 28 September, 23 November 2017	BH102	Ammoniacal nitrogen	Site Operating Procedure SOP 15	Quarterly	2.84	0.97	mg/l	3	0.3	yes
12 April, 30 May, 28 September, 23 November 2017	BH102	Chloride	Site Operating Procedure SOP 15	Quarterly	13.01	10.59	mg/l	100	250	no
12 April, 30 May, 28 September, 23 November 2017	BH102	тос	Site Operating Procedure SOP 15	Quarterly	7.55	6.42	mg/l	80	NA	yes
12 April, 30 May, 28 September, 23 November 2017	BH103	Ammoniacal nitrogen	Site Operating Procedure SOP 15	Quarterly	2.67	2.28	mg/l	3	0.3	no
12 April, 30 May, 28 September, 23 November 2017	BH103	Chloride	Site Operating Procedure SOP 15	Quarterly	27.76	23.11	mg/l	100	250	yes
12 April, 30 May, 28 September, 23 November 2017	BH103	тос	Site Operating Procedure SOP 15	Quarterly	10.43	9.36	mg/l	80	NA	no

*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 Groundwater Monitoring Groundwater Monitoring and Groundwater Monitoring Groundwater Monit

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

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

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

Surface regulations (private supply)
water EQS GTV's standards

<u>Drinking water (public supply) standards</u>

Interim Guideline Values (IGV)

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

Groundwater/Soil n	nonitoring te	mplate			Lic No:	W0059-03		Year	2017
Table 3: Soil results									
Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration	Average Concentration	unit		
, ,			0,				SELECT		
							SELECT		
	1								

Environmental Liabilities template Lic No: W0059-03 Year 2017

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

			Commentary
	FIDA SSIVILA CONTRACTOR OF THE STATE OF THE		
1	ELRA initial agreement status		
		Required but not submitted	
			ELRA not submitted to
2	ELRA review status	SELECT	date
3	Amount of Financial Provision cover required as determined by the latest ELRA	NA	
J	Amount of Financial Provision Cover required as determined by the fatest LENA	INA.	
4	Financial Provision for ELRA status	Required but not submitted	
5	Financial Provision for ELRA - amount of cover	Not known at this stage.	
			Financial provision will be made from Central Government funds by way of loans from
6	Financial Provision for ELRA - type	Other please specify	Central Government.
7	Financial provision for ELRA expiry date	Enter expiry date	No expiry date.
8	Closure plan initial agreement status	Required but not submitted	No expiry date.
9	Closure plan review status	SELECT	NA
10	Financial Provision for Closure status	Required but not submitted	
11	Financial Provision for Closure - amount of cover	Not known at this stage.	
			Financial provision will be made from Central Government funds by way of loans from
12	Financial Provision for Closure - type	Other please specify	Central Government.
13_	Financial provision for Closure expiry date	Enter expiry date	No expiry date.

Env	rironmental Management Programme/Continuous Improvement Programme	e template	Lic No:	W0059-03	Year	2017
	Highlighted cells contain dropdown menu click to view		Additional Information		_	
1 D	o you maintain an Environmental Mangement System (EMS) for the site. If yes, please detail in additional information	Yes	Latest version is 2010 upda ref: 15951rr689i1	ate, Entec (now Amec Foster Wheeler)		
2 Do	pes the EMS reference the most significant environmental aspects and associated impacts on-site	Yes	See above referenced EMS	document.		
Doe	es the EMS maintain an Environmental Management Programme (EMP) as required in accordance					
3	with the licence requirements	Yes	See above referenced EMS	document.		
Do	o you maintain an environmental documentation/communication system to inform the public on		Refer to Roscommon Counhttp://www.roscommonco	nty Council website: oco.ie/en/Services/Environment/Wasto	e	
4	environmental performance of the facility, as required by the licence	Yes	_Management,_Disposal_a	and_Recycling/		

Environmental Management Programn	Environmental Management Programme (EMP) report									
Objective Category	Target	Status (% completed)	How target was progressed	Responsibility	Intermediate outcomes					
SELECT		SELECT		SELECT	SELECT					
SELECT		SELECT		SELECT	SELECT					
SELECT		SELECT		SELECT	SELECT					

	Noise monitoring summary report						Lic No:	W0059-03	Year	2017	
	Was noise monitoring a licence requirement for the AER period? If yes please fill in table N1 noise summary below							Yes			
	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?					of the	Noise Guidance note NG4	No			
-	te have a noise re	-						No	<u> </u>		
4 When was th	ne noise reductio been changes re	n plan last updat	ied? Nico omissions (c	a plant or o	norational c	hangos) sin	co the last	NA			
5	been changes re	elevant to site no	noise survey	g. piant or o	perational c	ilialiges) sili	ce the last	Yes			
						1			•		
Table N1: No	oise monitoring s	ummary						1	ı		
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	Comments (ex. main noise sources on site, & extraneous noise ex. road traffic)	Is <u>site_compliant</u> with noise limits (day/evening/night)?
Not complet	ed (see below)							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?

SELECT

** please explain the reason for not taking action/resolution of noise issues?

Noise monitoring is required as per Table D.4.1 of the licence on an annual basis, but was not carried out in 2017 as the landfill site has ceased accepting waste. Noise monitoring was last carried out on 6 December 2010.

Resource Usage/Energy efficiency summary Lic No: W0059-03 Year 2017

Additional information

	Site energy use	
	reviewed as part of	
	AER, no	
	recommendations	
	made as landfill site	
1 When did the site carry out the most recent energy efficiency audit? Please list the recommendations in table 3 below	is now closed.	
SEAI - Large		
Is the site a member of any accredited programmes for reducing energy usage/water conservation Industry Energy		The Council is not
2 such as the SEAI programme linked to the right? If yes please list them in additional information Network (LIEN)	No	part of the LIEN
Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in		N/A - fuel oil not used
additional information	SELECT	in boilers on site.

Table R1 Energy usag	e on site			
Energy Use	Previous year		Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*
Total Energy Used (MWHrs)	46.9	59.224		NA - no site production
Total Energy Generated (MWHrs)	0	0		NA
Total Renewable Energy Generated (0	0		NA
Electricity Consumption (MWHrs) Fossil Fuels Consumption:	46.9	59.224		NA - no site production
Heavy Fuel Oil (m3)	0	0		NA
Light Fuel Oil (m3)	0	0		NA
Natural gas (m3)	0	0		NA
Coal/Solid fuel (metric tonnes)	0	0		NA
Peat (metric tonnes)	0	0		NA
Renewable Biomass	0	0		NA
Renewable energy generated on site	0	0		NA

* 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	e on site				Water Emissions	Water Consumption	
			Production +/- %	Energy		Volume used i.e not discharged to	
			compared to	consumption if it	Volume Discharged	environment e.g.	
	Water extracted	Water extracted	previous reporting	vs overall site	back to	released as steam	
Water use	Previous year m3/yr.	Current year m3/yr.	year**	production*	environment(m ³ yr):	m3/yr	Unaccounted for Water:
Groundwater							
Surface water							
Public supply	Estimated at 297	Estimated at 30	-90%	NA	Estimated at 30	NA	NA
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

Ī	Resourc	e Usage/Energy efficiency sur	mmary			Lic No:	W0059-03	Year	2017
		Table R3 Waste Stream Summary							
			Total	Landfill	Incineration	Recycled	Other		
		Hazardous (Tonnes)							
		Non-Hazardous (Tonnes)							

Table R4: Energy Au	Table R4: Energy Audit finding recommendations						
Date of audit		Description of Measures proposed		Predicted energy savings %	Implementation date	Responsibility	Status and comments
			SELECT	Ü		,	
			SELECT				
			SELECT				

Table R5: Power Generation: Where	power is genera	ted onsite (e.g. power ge	eneration facilities/fo	ood and drink indust	ry)please complete the follo
	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 or	n Site				

Complaints and Incidents summary template	Lic N	lo:	W0059-03	Year	2017	
Complaints		·	·		•	
<u></u>	Addi	itional informa	ation			
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						

Table :	1 Complaints summary						
Date	Category	Other type (please specify)	Brief description of complaint (Free txt <20 words)	Corrective action< 20 words	Resolution status	Resolution date	Further information
	SELECT		,		SELECT		
	SELECT				SELECT		
	SELECT				SELECT		
	SELECT				SELECT		
	SELECT				SELECT		
Total complaints open at start of reporting year Total new complaints received during reporting year							
Total complaints closed during							
reporting year							
Balance of complaints end of reporting year							

		Incidents				1								
					Additional inform	ation								
Have any incidents of	occurred on site in the current repc year in Tal	orting year? Please list all incid ple 2 below	ents for current reporting		Exceedences of Li	cence limits for car	bon dioxide in perir	meter monitoring b	oreholes as per	relevant table of AER	template. Exce	edences detailed i	n quarterly rep	orts.
	on on how to report and what stitutes an incident	What is an incident												
Table 2 Incidents sur	mmary	1		T		T		1	ı	1				1
			Incident category*please refer to			Other cause(please	Activity in progress at time			Corrective action<20	Preventative action <20		Resolution	Likelihood of
Date of occurrence	Incident nature	Location of occurrence	guidance	Receptor	Cause of incident	specify)	of incident	Communication	Occurrence	words	words	Resolution status	date	reoccurence
		Perimeter gas boreholes												
See above	Breach of ELV	GM202, GM203 and GM208	1. Minor	Air	Operational contr	ols	Normal activities	EPA	Recurring			Ongoing	NA	High
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
Total a salas of														

SELECT

SELECT

Total number of incidents current year See quarterly reports.

Total number of incidents previous year

See quarterly reports.

See quarterly reports.

% reduction/ increase

WASTE SUMMARY	Lic No:	W0059-03	Year	2017	
SECTION A-PRTR ON SITE WASTE TREATMENT AND WASTE TRANSFERS TAB- TO BE COMPLETED BY ALL II	PPC AND WASTE FACILITIES	PRTR facility logon	dropdown	list click to see options	

CECTIO	ALD MACTE ACCEPTED	ONTO CITE TO BE COMPLETED BY ALL IDDC 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

1 is to be captured through PRTR reporting) 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

Landfill ceased accepting waste in 2010. Landfill ceased accepting waste in 2010

2010.

Additional Information Landfill ceased

accepting waste in

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

Table 1 Dataile of waste accounted ante your site for recovery disposal or treatment (do not include wastes generated at your site, as those will have been reported in your DPTP weekback)

Table 1 Details C	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 PKTK workbook)										
Licenced annual	EWC code	Source of waste accepted	Description of waste	Quantity of waste	Quantity of waste accepted in	Reduction/	Reason for	Packaging Content (%)-	Disposal/Recovery or	Quantity of	Comments -
tonnage limit for your			accepted	accepted in current	previous reporting year (tonnes)	Increase over	reduction/increase	only applies if the waste	treatment operation carried out	waste remaining	
site (total			Please enter an	reporting year (tonnes)		previous year +/ -	from previous	has a packaging	at your site and the description	on site at the	
tonnes/annum)			accurate and detailed			%	reporting year	component	of this operation	end of reporting	
			description - which							year (tonnes)	
			applies to relevant EWC								
			code								
	European Waste Catalogue EWC codes		European Waste								
			Catalogue EWC codes								
SEE PRTR FOR WASTES	ACCEPTED AT RECYCLING CENTRE										
										4	

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

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

- 6 Does your facility have relevant nuisance controls in place?
- 7 Do you have an odour management system in place for your facility? If no why?
- 8 Do you maintain a sludge register on site?

N/A	No waste processing infrastructure.
Yes	
103	
Yes	Refer to site operating procedure SOP7
Yes	Refer to site operating procedure SOP29 for odour management

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
				Landfill ceased
				accepting waste in
				2010.
	<u>'</u>			

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	licted date to Licence permits se landfilling asbestos	Licence permits asbestos Is there a separate cell for asbestos?	eparate cell	area occupied by	Lined disposal area occupied by waste	Unlined area	Comments on liner type
											SELECT UNIT	SELECT UNIT	SELECT UNIT	
														0.5m BES and
C	cells 1-8	1980	2010	No	Public	Non Hazardous	Ceased 2010	Yes	No	No	5.02	2.27	2.75	2mm HDPE

ASTE SUMMARY	Υ				Lic No:	W0059-03		Year	2017
ble 4 Environme	ental monitoring-landfill only	Landfill Manual-Monitoring Stan	idards						
ns meterological mitoring in mpliance with Landfill rective (LD) standard 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	
								There will be no statement for 2017 as it is understood that there are no charges to levy	
alease refer to Landfil	Yes ill Manual linked above for relevant Landfil	Yes Directive monitoring standards	Yes	Yes	Yes	No	No	on a closed landfill.	J
ble 5 Capping-La		Directive monitoring standards							
Area uncapped*	Area with temporary cap SELECT UNIT	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			
ne	None				regulating layer, then geosynthetic gas drainage layer, LLDPE geomembrane, geosynthetic drainage layer,				
eachate released to	es daily cover area	hate mass load information below		None	restoration soils.	Yes No]]	1	
ible 6 Leachate-L eachate from your sit	es daily cover area Landfill only te treated in a Waste Water Treatment Pla	int?		Leachate (Chloride) mass load kg/annum			Comments		
able 6 Leachate-Leachate from your site eachate released to solutions of leachate in	es daily cover area Landfill only te treated in a Waste Water Treatment Pla surface water? If yes please complete leac Leachate (BOD) mass load (kg/annum) Please ensure that all information rei st-Landfill only	int? hate mass load information below Leachate (COD) mass load (kg/annum)	Leachate (NH4) mass load (kg/annum) consistent with the Landfil Was surface emissions monitoring performed	Leachate (Chloride) mass load kg/annum Il Gas Survey submitted in	restoration soils. Leachate treatment on-site	No Specify type of	Comments]	



| PRTR# : W0059 | Facility Name : Ballaghaderreen Landfill | Filename : W0059_2017.xls | Return Year : 2017 |

Guidance to completing the PRTR workbook

PRTR Returns Workbook

Version 1 1 10

REFERENCE YEAR 2017

1. FACILITY IDENTIFICATION

Parent Company Name	Roscommon County Council
Facility Name	Ballaghaderreen Landfill
PRTR Identification Number	W0059
Licence Number	W0059-03

Classes of Activity

0.00000 017.0017	• 1
N	o. class_name
	- Refer to PRTR class activities below

	Aghalustia Townland
Address 2	Ballaghaderreen
Address 3	
Address 4	
	Roscommon
Country	Ireland
Coordinates of Location	
River Basin District	IEGBNISH
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	Niall Kennedy
AER Returns Contact Email Address	nkennedy@roscommoncoco.ie
AER Returns Contact Position	
AER Returns Contact Telephone Number	
AER Returns Contact Mobile Phone Number	NA
AER Returns Contact Fax Number	2 T
Production Volume	0.0
Production Volume Units	
Number of Installations	
Number of Operating Hours in Year	
Number of Employees	1
User Feedback/Comments	Version 1, 23 March 2018. Significant reduction in methane flared in
	2017 as flare only operational for ~12-14 hrs/day.
Web Address	

2. PRTR CLASS ACTIVITIES

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

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

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

4. WASTE IMPORTED/ACCEPTED ONTO SITE	Guidance on waste imported/accepted onto site
Do you import/accept waste onto your site for on-	
site treatment (either recovery or disposal	
activities) ?	

| PRTR# : W0059 | Facility Name : Ballaghaderreen Landfill | Filename : W0059_2017.xls | Return Year : 2017 | Page 2 of 2

4.1 RELEASES TO AIR

Link to previous years emissions data

| PRTR# : W0059 | Facility Name : Ballaghaderreen Landfill | Filename : W0059 2017.xls | Return Year : 2017 |

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SECTION A: SECTOR SPECIFIC PRTR POLLUTANTS

	RELEASES TO AIR				Please enter all quantities in this section in KGs				
POLLUTANT				METHOD		QUANTITY			
				Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	
					0.0	0.0	0.0	0.0	
				GasSim V2.5 model and					
01	Methane (CH4)	C	OTH	measured data	351870.6	351870.6	0.0	0.0	
	* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button								

SECTION B : REMAINING PRTR POLLUTANTS

	TEMAINING PITTIP GEGTAN	Please enter all quantities in this section in KGs								
	POLLUTANT				METHOD	QUANTITY				
					Method Used					
	No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	
						0.0	0.0	0.0	0.0	
15		Chlorofluorocarbons (CFCs)	С	OTH	GasSim V2.5 model	1.22	1.22	2 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 PIE								
POLLUTANT				METHOD	QUANTITY				
				Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	
					0.0		0.0 0.	0.0	

^{*} 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) KGyr for Section A: Sector specific PRTR pollutants above. Please complete the table below:

Landfill:	Ballaghaderreen Landfill

Landfill:	Ballaghaderreen Landfill					
Please enter summary data on the quantities of methane flared and / or utilised			Met	hod Used		
				Designation or	Facility Total Capacity m3	
	T (Total) kg/Year	M/C/E	Method Code	Description	per hour	
Total estimated methane generation (as per	r					
site model)	459248.6	С	OTH	Gassim 2.5	N/A	
Methane flared	107378.0	С	OTH	Landfill gas survey 2017		(Total Flaring Capacity)
Methane utilised in engine/s	0.0	С	OTH	No engines	0.0	(Total Utilising Capacity)
Net methane emission (as reported in Section	1					
A above	351870.6	С	OTH	Gassim 2.5 model and landf	N/A	

4.2 RELEASES TO WATERS

Link to previous years emissions data

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SECTION A: SECTOR SPECIFIC PRTR POLLUTANTS

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

	RELEASES TO WATERS				Please enter all quantitie	s in this section in KO	às	
POI	LLUTANT						QUANTITY	
				Method Used				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.	0 0.	0.0	0.0

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

SECTION B: REMAINING PRTR POLLUTANTS

	RELEASES TO WATERS				Please enter all quantiti	es in this section in l	(Gs	
POI	LUTANT						QUANTITY	
				Method Used				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0	0.0	0.0 0.0	0.0

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

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

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

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

4.3 RELEASES TO WASTEWATER OR SEWER

Link to previous years emissions data

| PRTR# : W0059 | Facility Name : Ballaghaderreen Landfill | Filename : W0059_2017.xls | Return Y

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SECTION A: PRTR POLLUTANTS

	OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WAST	E-WATER TR	EATMENT OR SEW	ER	Please enter all quantitie				
	POLLUTANT			THOD	QUANTITY				
				Method Used					
No. Annex II	No. Annex II Name		M/C/E Method Code Designation or Description		Emission Point 1	T (Total) KG/Year	A (A	Accidental) KG/Year	F (Fugitive) KG/Year
						0.0	0.0	0.0	0.0

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

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

OLOTION B : HEIMAINING OLEOTAIN EIM	1611 B. T.E.III/AITHTO T. GEEGT ATT. Elimodicito (ac required in your electric)											
OFFSITE TRAN	SFER OF POLLUTANTS DESTINED FOR WASTE-W	Please enter all quantities in this section in KGs										
PO	LLUTANT		METHO)D	QUANTITY							
			Met	hod Used								
Pollutant No. Name		M/C/E Method Code Designation or Description		Emission Point 1	T (Total) KG/Year	Α ((Accidental) KG/Year	F (Fugitive) KG/Year				
					0.0)	0.0	0.0	0.			

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

Link to previous years emissions data Page 1 of 1

4.4 RELEASES TO LAND

Link to previous years emissions data

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SECTION A: PRTR POLLUTANTS

	RELE	ASES TO LAND			Please enter all quantit	is	
POLLUTANT			M	ETHOD			QUANTITY
				Method Used			
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
						0.0	0.0

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

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

	RELEASES TO LAND				Please enter all quantitie	Gs	
	POLLUTANT		METH	OD			QUANTITY
			Me	ethod Used			
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0	0	0.0 0.0

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

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE | PRITR#: W0059 | Facility Name : Ballaghaderreen Landfill | Filename : W0059_2017.xls | Return Year : 2017 | Please enter all quantitites on this sheet in Tonnes 27/03/2018 09:38

_				Please enter	all quantities on this sheet in Tonnes								0
				Quantity (Tonnes per						Haz Waste: Name and Licence/Permit No of Next Destination Facility Maste: Name and Licence/Permit No of	Destination Facility Non Haz Waste: Address of	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE	Actual Address of Final Destination i.e. Final Recovery / Disposal Site
				Year)				Method Used		Recover/Disposer	Recover/Disposer	ONLY)	(HAZARDOUS WASTE ONLY)
	Transfer Destination	European Waste Code	Hazardous		Description of Waste	Waste Treatment Operation	M/C/E	Method Used	Location of Treatment				
	Within the Country	15 01 01	No	5.533	paper and cardboard packaging	R5	С	Weighed	Offsite in Ireland	Barna Waste,CW074	Carrowbrowne, Headford Road, Galway,., Ireland Carrowbrowne, Headford		
	Within the Country	15 01 02	No	7.284	plastic packaging	R3	С	Weighed	Offsite in Ireland	Barna Waste,CW074	Road, Galway,., Ireland Carrowbrowne, Headford		
	Within the Country	15 01 04	No	4.589	metallic packaging	R4	С	Weighed	Offsite in Ireland	Barna Waste,CW074	Road, Galway, ., Ireland		
	To Other Countries	16 05 04	Yes	1.006	gases in pressure containers (including halons) containing dangerous substances	R6	М	Weighed	Abroad	Indaver Ireland, W36-02 KMK Metals Recycling	4 Haddington Terrace, Dun Laoighre, Co Dublin,, Ireland Cappincur, Tullamor,, Co	Strasse,1028237,Bremen,.,G	Louis-Krages Strasse,1028237,Bremen,.,G ermany
	Within the Country	16 06 04	No	0.64	alkaline batteries (except 16 06 03)	R4	М	Weighed	Offsite in Ireland	Ltd,W01113-03	Offaly, Ireland Clonmillam Industrial		
	Within the Country	16 06 05	No	0.0	other batteries and accumulators landfill leachate other than those mentioned	R4	M	Weighed	Offsite in Ireland	Enva Portlaoise,W0184-01	Estate,,Co Laois,Ireland Ballaghaderreen,,Co		
	Within the Country	19 07 03	No	16737.0		D8	М	Volume Calculation	Offsite in Ireland	WWTW,D0123-01	Roscommon,Ireland 52 Creagh		
	To Other Countries	20.01.02	No	24.889	, glaca	R5	М	Weighed	Abroad	Clearcircle Environmental (NI) Ltd t/a Glassdon,LN/08/103	Road,Toomebridge,Co Antrim,BT41 3SE,United Kingdom		
	To Other Countries	20 01 02	INO	24.009	giass	no	IVI	Weighed	ADIOAU	Glassdoff,LN/06/103	Glen Abbey Complex,Belgarde		
	Vithin the Country	20 01 11	No	1.94	textiles	R5	М	Weighed	Offsite in Ireland	Textile Recycling,CW014	Road, Tallaght, D24, Ireland	Frylite,WML26/26,Orchard	
											Orchard Road, Orchard Road Industrial	Industrial	Orchard Road, Orchard Road Industrial
	To Other Countries	20 01 26	Yes	0.0	oil and fat other than those mentioned in 20 01 25	R9	М	Weighed	Abroad	Frylite,WML26/26	Estate,Strabane,Co Tyrone BT82 9FR,United Kingdom	BT82 9FR,United Kingdom	Estate,Strabane,Co Tyrone BT82 9FR,United Kingdom Louis-Krages
	To Other Countries	20 01 27	Yes	4.452	paint, inks, adhesives and resins containing dangerous substances discarded electrical and electronic	R6	М	Weighed	Abroad	Indaver Ireland,W36-02	4 Haddington Terrace, Dun Laoighre, Co Dublin,., Ireland	Strasse,1028237,Bremen,.,G	
	Within the Country	20 01 36	No	46.278	equipment other than those mentioned in 20 on 21, 20 on 23 and 20 on 35	R5	М	Weighed	Offsite in Ireland	KMK Metals Recycling Ltd,W01113-03	Cappincur,Tullamor,.,Co Offaly,Ireland Carrowbrowne,Headford		
	Within the Country	20 01 38	No	24.22	wood other than that mentioned in 20 01 37	R3	М	Weighed	Offsite in Ireland	Barna Waste,CW074	Road,Galway,.,Ireland Carrowbrowne,Headford		
	Within the Country	20 01 39	No	0.0	plastics	R5	М	Weighed	Offsite in Ireland	Barna Waste,CW074	Road,Galway,.,Ireland Carrowbrowne,Headford		
	Within the Country	20 01 40	No	41.08	metals	R4	M	Weighed	Offsite in Ireland	Barna Waste,CW074	Road, Galway,., Ireland Carrowbrowne, Headford		
	Within the Country	20 03 01	No	77.792	! mixed municipal waste	D1	M	Weighed	Offsite in Ireland	Barna Waste,CW074	Road,Galway,.,Ireland Carrowbrowne,Headford		
	Within the Country	20 01 01	No		paper and cardboard	R5	С	Weighed	Offsite in Ireland	Barna Waste,CW074	Road,Galway,.,Ireland		

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