SELECT	cells that are highlighted blue contain a dropdown menu click to select one option from the list					
guidance document link	cells that contain underlined text click to access relevant guidance documents for this section					
Table heading *	table headings followed by a symbol have an associated footnote or instructions					
Cells with red indicator in top right corner	cells that have a red indicator in the top right corner contain a comment box with further instructions or clarification					

Please note an interpretation of results is still required. This should be entered in the additional information/comments boxes within the templates. Please size these boxes appropriately to fit your interpretation, if additional space is required please include an appendix to the AER template and merge it as part of the AER PDF document. The excel template should have all cells sized appropriately so that all text is readable before it is converted to PDF document.

Facility Information Summary

AER Reporting Year Licence Register Number 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							
	W0070-01							
Benduff Landfill Site								
Benduff, Rosscarbery, Co. Cork								
	3821							
	Installation for the disposal of non hazard	ous						
	(52E, 53N)							

Description of Activities on Site during 2017:

The Facility at Benduff is a closed Landfill. Deposition of waste at the landfill ceased in April 2004 and the final capping works were completed by Q4 2004. The main activity at the site during 2017 was the extraction of gas from the closed landfill (extracted gas is flared on-site).

Exceedances of Licence Limits during 2017:

None.

Overview of Licence Compliance during 2017:

There was no non-compliance issued against the licence in 2017.

Declaration:

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

Signature: Mairead Hales
Group/Facility manager
(or nominated, suitably qualified and experienced deputy)

Date: 14/03/2018

AIR-summary template	Lic No:	W0070-01	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 curren 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 <u>do not</u> need to complete the tables		Additional information Current flare installation is a pre-aerated open f 500 cubic meter per hour capacity. Emissions mo not possible from such an installation.		
Periodic/Non-Continuous Monitoring				

Are there any results in breach of licence requirements? If yes please provide brief details in the comment section of TableA1 below
 Was all monitoring carried out in accordance with EPA guidance note AG2 and using the basic air monitoring checklist?
 AGN2

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

Emission reference no:		Frequency of	ELV in licence or any revision therof	Licence Compliance criteria		Compliant with licence limit	Method of analysis	Annual mass	Comments - reason for change in % mass load from previous year if applicable
	SELECT			SELECT	SELECT		SELECT		
	SELECT			SELECT			SELECT		
	SELECT			SELECT			SELECT		
	SELECT			SELECT	SELECT	SELECT	SELECT		

No

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

Continuous Monitoring

Does your site carry out continuous air emissions monitoring?

4

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)

AIR-summary template	Lic No:	W0070-01 Yea	2017
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		

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

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

Table A2: Summary of average emissions -continuous monitoring

Table A3: Abatement system bypass reporting table

Bypass protocol

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

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

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

	Solvent use and management on site				
8	Do you have a total Emission Limit Value of direct and fugitive en	missions on site? if y	yes please fill out tables A4 and A5	No	
	Table A4: Solvent Management Plan Summary Total VOC Emission limit value	<u>Solvent</u> regulations	Please refer to linked solvent regulations to complete table 5 and 6		

ik-summary	template				Lic No:	W0070-01		Year	2017	
Reporting year	Total solvent input on site (kg)			Total Emission Limit Value (ELV) in licence or any revision therof	Compliance					
					SELECT					
					SELECT					
Table A5:	Solvent Mass Balan	ce summary								
	(I) Inputs (kg)		(O) Outputs (kg)							
Solvent	(I) Inputs (kg)		Solvents lost in water (kg)		Fugitive Organic Solvent (kg)	Solvent released in other ways e.g.	Solvents destroyed onsite through	Total emission of Solvent to air (kg)		
Solvent	(I) Inputs (kg)									
Solvent	(I) Inputs (kg)									

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)

SW4

downstream

Lic No: W0070-01 Year

2017

Additional information

SW1, SW4 & SW5 - Bi-annual visual inspections - No evidence of

contamination recorded

Does your site have licensed emissions direct to surface water or direct to sewer? If yes please complete table W2 1 and W3 below for the current reporting year and answer further questions, If you do not have licenced emissions you only need to complete table W1 and or W2 for storm water analysis and visual inspections

No

Yes

Was it a requirement of your licence to carry out visual inspections on any surface water discharges or watercourses 2 on or near your site? If yes please complete table W2 below summarising only any evidence of contamination noted during visual inspections

Table W1 Storm water monitoring

ELV or trigger Location Licence Location Monitoring level in licence Unit of Compliant with elative to site PRTR Parameter Licenced Parameter Compliance Measured value Comments reference date or any revision measurement licence activities criteria thereof* SW1 31/03/2017 N/A 6.70 N/A pH units upstream рH ves SW1 N/A 120.00 Conductivity 31/03/2017 uS/cm @20oC upstream N/A yes SW1 upstream Dissolved Oxygen 31/03/2017 N/A N/A 8 78 mg/L yes SW1 upstream Ammonia (as N) 31/03/2017 N/A N/A 0.34 mg/L yes SW1 BOD N/A N/A <1.00 upstream 31/03/2017 mg/L yes SW1 COD 31/03/2017 N/A N/A <1.00 upstream mg/L yes SW1 upstream Chlorides (as Cl) 31/03/2017 N/A N/A 23.40 mg/I yes SW1 upstream Suspended Solids 31/03/2017 N/A N/A 50.00 mg/L yes SW1 upstream 23/08/2017 N/A N/A Boron mg/L yes SW1 Calcium 23/08/2017 N/A 8.77 upstream N/A mg/I yes SW1 upstream Cadmium and compounds (as Cd) 23/08/2017 N/A N/A <20.00 μg/L yes SW1 Chromium and compounds (as Cr) 23/08/2017 N/A N/A <20.00 upstream μg/L yes SW/1 upstream Copper and compounds (as Cu) 23/08/2017 N/A N/A ~20.00 μg/L yes SW1 upstream 23/08/2017 N/A N/A 38.00 Iron μg/I yes SW1 23/08/2017 N/A <10.00 upstream Mercury and compounds (as Hg) N/A μg/L yes SW1 23/08/2017 N/A N/A 2 14 upstream Potassium mg/l yes 2.74 SW1 Magnesium 23/08/2017 N/A N/A upstream mg/L ves 28.00 SW/1 upstream Manganese (as Mn) 23/08/2017 N/A N/A μg/L yes SW1 upstream Sodium 23/08/2017 N/A N/A 11.19 mg/L yes SW1 Nickel and compounds (as Ni) 23/08/2017 N/A N/A upstream μg/L yes SW1 upstream Total phosphorus 23/08/2017 N/A N/A 0.01 mg/L yes 23/08/2017 SW1 upstream Lead and compounds (as Pb) N/A N/A <20.00 ug/I ves Sulphate 23/08/2017 N/A SW/1 unstream N/A 7 38 mg/L SO yes SW1 upstream Total Oxidised Nitrogen (TON) 23/08/2017 N/A N/A 1.48 mg/L N yes 23/08/2017 76.00 SW1 Zinc and compounds (as Zn) N/A N/A upstream μg/L yes SW1 upstream Alkalinity 23/08/2017 N/A N/A 25.30 yes mg/L SW1 Ortho-phosphate (as PO4) N/A N/A < 0.01 upstream 23/08/2017 mg/L PO₄ yes SW4 31/03/2017 N/A 8.10 downstream nH N/A pH units yes SW4 downstream Conductivity 31/03/2017 N/A N/A 356.00 μS/cm @20oC yes SW4 N/A N/A 9.05 downstream Dissolved Oxygen 31/03/2017 mg/L yes SW4 downstream Ammonia (as N) 31/03/2017 N/A N/A 0.28 mg/L yes SW4 downstream BOD N/A N/A <1.00 31/03/2017 mg/L yes SW4 downstream COD 31/03/2017 N/A N/A <1.00 mg/L yes SW4 downstream Chlorides (as Cl) 31/03/2017 N/A N/A 29.18 mg/L yes SW4 Suspended Solids 31/03/2017 N/A N/A downstream 2.00 mg/L yes SW4 downstream Boron 23/08/2017 N/A N/A mg/L yes SW4 downstream 23/08/2017 N/A N/A 54.70 Calcium mg/L yes SW4 downstream Cadmium and compounds (as Cd) 23/08/2017 N/A N/A <20.00 μg/L yes SW/4 downstream Chromium and compounds (as Cr) 23/08/2017 N/A N/A ~20.00 μg/L yes SW4 N/A <20.00 23/08/2017 N/A downstream Copper and compounds (as Cu) μg/L yes 106.00 SW4 N/A downstream Iron 23/08/2017 N/A μg/L yes SW4 23/08/2017 N/A N/A <10.000 downstream Mercury and compounds (as Hg) μg/I yes SW4 downstream Potassium 23/08/2017 N/A N/A 11.80 mg/L yes SW/4 downstream Magnesium 23/08/2017 N/A N/A 7 27 mg/L yes SW4 Manganese (as Mn) N/A 51.00 downstream 23/08/2017 N/A μg/L yes SW4 Sodium N/A N/A 16.30 downstream 23/08/2017 mg/L yes SW4 downstream Nickel and compounds (as Ni) 23/08/2017 N/A N/A μg/L yes SW4 downstream Total phosphorus 23/08/2017 N/A N/A 0.27 mg/L yes SW/4 downstream Lead and compounds (as Pb) 23/08/2017 N/A N/A ~20 000 μg/L yes SW4 downstream Sulphate 23/08/2017 N/A N/A 37.46 mg/L SO₄ yes Total Oxidised Nitrogen (TON) SW4 23/08/2017 N/A N/A 4.31 downstream mg/L N yes SW4 downstream Zinc and compounds (as Zn) 23/08/2017 N/A N/A 133.00 μg/L yes 131.11 SW4 downstream Alkalinity 23/08/2017 N/A N/A mg/L yes Ortho-phosphate (as PO4)

23/08/2017

N/A

N/A

0.21

mg/L PO

yes

AER Monito	ing returns summary template-WATER/WAS	TEWATER(SEWER)			Lic No:	W0070-01		Year	2017
SW5	downstream	рН	31/03/2017	N/A	N/A	7.00	pH units	yes	
SW5	downstream	Conductivity	31/03/2017	N/A	N/A	189.00	μS/cm @20oC	yes	
SW5	downstream	Dissolved Oxygen	31/03/2017	N/A	N/A	8.53	mg/L	yes	
SW5	downstream	Ammonia (as N)	31/03/2017	N/A	N/A	0.10	mg/L	yes	
SW5	downstream	BOD	31/03/2017	N/A	N/A	<1.00	mg/L	yes	
SW5	downstream	COD	31/03/2017	N/A	N/A	<1.00	mg/L	yes	
SW5	downstream Chlorides (as Cl)		31/03/2017	N/A	N/A	21.99	mg/L	yes	
SW5	downstream	Suspended Solids	31/03/2017	N/A	N/A	2.00	mg/L	yes	
SW5	downstream	Boron	23/08/2017	N/A	N/A		mg/L	yes	
SW5	downstream	Calcium	23/08/2017	N/A	N/A	18.80	mg/L	yes	
SW5	downstream Cadmium and compounds (as Cd)		23/08/2017	N/A	N/A	<20.00	μg/L	yes	
SW5	downstream Chromium and compounds (as Cr)		23/08/2017	N/A	N/A	<20.00	μg/L	yes	
SW5	downstream Copper and compounds (as Cu)		23/08/2017	N/A	N/A	<20.00	μg/L	yes	
SW5	downstream	Iron	23/08/2017	N/A	N/A	145.00	μg/L	yes	
SW5	downstream Mercury and compounds (as Hg)		23/08/2017	N/A	N/A	<10.00	μg/L	yes	
SW5	downstream	Potassium	23/08/2017	N/A	N/A	3.24	mg/L	yes	
SW5	downstream	Magnesium	23/08/2017	N/A	N/A	3.70	mg/L	yes	
SW5	downstream	Manganese (as Mn)	23/08/2017	N/A	N/A	69.00	μg/L	yes	
SW5	downstream	Sodium	23/08/2017	N/A	N/A	13.50	mg/L	yes	
SW5	downstream Nickel and compounds (as Ni)		23/08/2017	N/A	N/A		μg/L	yes	
SW5	downstream Total phosphorus		23/08/2017	N/A	N/A	0.04	mg/L	yes	
SW5	downstream Lead and compounds (as Pb)		23/08/2017	N/A	N/A	<20.00	μg/L	yes	
SW5	downstream	Sulphate	23/08/2017	N/A	N/A	10.55	mg/L SO ₄	yes	
SW5	downstream	Total Oxidised Nitrogen (TON)	23/08/2017	N/A	N/A	1.73	mg/L N	yes	
SW5	downstream Zinc and compounds (as Zn)		23/08/2017	N/A	N/A	33.00	μg/L	yes	
SW5	downstream	Alkalinity	23/08/2017	N/A	N/A	54.09	mg/L	yes	
SW5	downstream	Ortho-phosphate (as PO4)	23/08/2017	N/A	N/A	0.02	mg/L PO ₄	yes	

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

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

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

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

3	Was there any result in breach of licence requirements? If yes please provide brief details in the comment section of Table W3 below	No	Additional information
	Was all monitoring carried out in accordance with EPA guidance and		
	hecklists for Quality of Aqueous Monitoring Data Reported to the EPA? If o please detail what areas require improvement in additional information External /Internal Lab Quality Assessment of		
4	box <u>checklist</u> results checklist	Yes	

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

Emission reference no:	Emission released to	Parameter/ SubstanceNote 1	Type of sample	Frequency of monitoring	Averaging period	ELV or trigger values in licence or any revision therof ^{Note 2}	Licence Compliance criteria	Measured value		Compliant with licence		Procedural	Procedural reference standard number	Annual mass load (kg)	Comments
	SELECT	SELECT	discrete		SELECT		SELECT		SELECT	SELECT	SELECT	SELECT			
Note 1: Volume	tric flow shall be in	cluded 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 standar

Continuous monitoring

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

Additional Information

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			

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)		Lic No:	W0070-01	Year	2017	
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

								% change +/- from previous reporting	Monitoring	Number of ELV	
Emission	Emission		ELV or trigger values in licence or	Averaging	Compliance	Units of				exceedences in	
reference no:	released to	Parameter/ Substance	any revision thereof	Period	Criteria	measurement	current reporting year (kg)		downtime (hours)	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	Corrective	Was a report	When was this report
				bypass	action*	submitted to the	submitted?
						EPA?	
						SELECT	

*Measures taken or proposed to reduce or limit bypass frequency

Bund/Pipeline testing template		Lic No:	W0070-01		Year	2017	
Bund testing	dropdown menu click to see options			Additional information	-		
Are you required by your licence to undertake in	tegrity testing on bunds and containment structures ? if yes ple	ase fill out table B1 below listing all new bunds					
and containment structures on site, in addition t	o all bunds which failed the integrity test-all bunding structure	es which failed including mobile bunds must be					
listed in the table below, please include all bund	s outside the licenced testing period(mobile bunds and chems	tore included)	Yes				
2 Please provide integrity testing frequency period			3 years		-		
	ground pipelines (including stormwater and foul), Tanks, sump	s and containers? (containers refers to					
3 "Chemstore" type units and mobile bunds)			No				
4 How many bunds are on site?			1				
5 How many of these bunds have been tested with	in the required test schedule?		1				
6 How many mobile bunds are on site?			0				
7 Are the mobile bunds included in the bund test s	chedule?		N/A				
8 How many of these mobile bunds have been test	ed within the required test schedule?		N/A				
9 How many sumps on site are included in the inte	grity test schedule?		N/A				
10 How many of these sumps are integrity tested with	thin the test schedule?		N/A				
Please list any sump integrity failures in table B	L						
11 Do all sumps and chambers have high level liquid	alarms?		Yes				
12 If yes to Q11 are these failsafe systems included	in a maintenance and testing programme?		Yes				
13 Is the Fire Water Retention Pond included in you	r integrity test programme?		N/A				

	Table B1: Summary details o	f bund /containment structure int	egrity test	Т									
Bund/Containme structure ID			Product containment	Actual capacity	Capacity required*	Type of integrity test	Other test type	Integrity reports maintained on site?		Integrity test failure explanation <50 words		Scheduled date	Results of retest(if in current reporting year)
	SELECT					SELECT			SELECT		SELECT		
	SELECT					SELECT		SELECT	SELECT		SELECT		
* Capacity required show	ld comply with 25% or 110% containment	rule asdetailed in your licence					Commentary						
Has integrity test	ng been carried out in accorda	ance with licence requirements an	d are all structures tested										
15 in line with BS800	7/EPA Guidance?			bunding and storage guide	lines	SELECT							
16 Are channels/trai	sfer systems to remote conta	inment systems tested?				SELECT							

SELECT

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

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 1 all underground structures and pipelines on site which failed the integrity test and all which have not been tested withing the integrity test period as specified 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)

SELECT	
SELECT	

Table	B2: Summary details of p	ipeline/underground structures ir	tegrity test	I					
Structure ID	Type system		Does this structure have Secondary containment?	Type of secondary containment		Integrity reports maintained on site?			Results of retest(if in current reporting year)
	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT

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

Groundwater/Soil monitoring template

Lic No:	W0070-01	Year

	Commen	ts
Are you required to carry out groundwater monitoring as part of your licence requirements? 2 Are you required to carry out soil monitoring as part of your licence requirements?	yes no	Please provide an interpretation of groundwater monitoring data in the interpretation box below or if yo
3 Do you extract groundwater for use on site? If yes please specify use in comment section	no	require additional space please include a groundwater/contaminated land monitoring result 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 G8) and submit separately through ALDER as a licensee return AND answer questions 5-12 below.	yes	GW quality is in line with previous years. Groundwat quality is impacted by the presence of a very wer leachate in the immediate vicinity of the site. Howeven the impact reduces with distance away from the land most likely as a result of dilution affects. Monitoria
5 Is the contamination related to operations at the facility (either current and/or historic)	yes	results indicate that the landfill is not impacting on surfation water quality downstream of the landfill.
6 Have actions been taken to address contamination issues?If yes please summarise remediation strategies proposed/undertaken for the site	yes	The Tier 3 Risk Assessment, updated in Q4 2017, indica that the landfill site does not present a significa
⁷ Please specify the proposed time frame for the remediation strategy	N/A	environmental risk to off-site receptors and reccomme
8 Is there a licence condition to carry out/update ELRA for the site?	no	that the groundwater monitoring programme shou continue to be used to determine if the impacts
⁹ Has any type of risk assesment been carried out for the site?	yes	groundwater are reducing over time as leacha generation further reduces.
¹⁰ Has a Conceptual Site Model been developed for the site?	yes	Monitoring wells MW-2 and MW-3 are used as complia
¹¹ Have potential receptors been identified on and off site?	yes	monitoring wells. Compliance monitoring is undertaker pCOCs ammonia, chloride and conductivity.
¹² Is there evidence that contamination is migrating offsite?	yes	p

Table 1: Upgradient Groundwater monitoring results

	Sample									Upward trend in pollutant
Date of	location			Monitoring	Maximum	Average				concentration over last 5
sampling	reference	Parameter/ Substance	Methodology	frequency	Concentration++	Concentration+	unit	GTV's*	SW EQS	years of monitoring data
31/03/2017	/ MW3	Ammonia	konelab aquakem SOP 2057	Quarterly	0.28	0.19	mg/l	0.065-0.175		no
31/03/2017	MW3	Conductivity	Electrometry SOP 2076	Quarterly	171.00	169.00	uS/cm20°C	800-1875		no
31/03/2017	MW3	рН	Electrometry SOP 2004	Quarterly	6.00	5.93	pH units			no
31/03/2017	MW3	Temperature	Temp. Probe	Quarterly	14.60	12.33	Deg. C			no
31/03/2017	/ MW3	Chloride	konelab aquakem SOP 2065	Quarterly	28.58	25.13	mg/l	24-187.5		no
31/03/2017	MW3	Dissolved Oxygen	Oxygen Meter SOP 2006	Quarterly	4.55	3.50	mg/l O2			no
31/03/2017	MW3	Potassium	ICP-MS	Quarterly	2.40	2.22	mg/l			no
31/03/2017	/ MW3	Sodium	ICP-MS	Quarterly	17.70	16.75	mg/l	150		no
31/03/2017	MW3	Total Oxidised Nitrogen	konelab aquakem SOP 2058	Quarterly	0.50	0.50	mg/l			no
31/03/2017	MW3	Total Organic Carbon	Oxidation & Colourimetry	Quarterly	11.30	5.88	mg/l			no
31/03/2017	/ MW3	Phenols	Not Known	Quarterly	0.002	0.002	mg/l			no
23/08/2017	MW3	Boron	ICP-MS	Annual	0.02	N/A	mg/l	0.75		no
23/08/2017	/ MW3	Cadmium	ICP-MS	Annual	<20.00	N/A	ug/l			no
23/08/2017	MW3	Calcium	ICP-MS	Annual	12.10	N/A	mg/l			no
23/08/2017	/ MW3	Chromium	ICP-MS	Annual	<20.00	N/A	ug/l	37.5		no

Groundwater/Soil n	nonitoring template			Lic No:	W0070-01		Year	2017
23/08/2017 MW3	Copper	ICP-MS	Annual	<20.00) N/A	ug/l	1500	no
23/08/2017 MW3	Iron	ICP-MS	Annual	3524.00) N/A	ug/l		no
23/08/2017 MW3	Lead	ICP-MS	Annual	<20.00) N/A	ug/l	18.75	no
23/08/2017 MW3	Magnesium	ICP-MS	Annual	4.02	N/A	mg/l		no
23/08/2017 MW3	Zinc	ICP-MS	Annual	67.00) N/A	ug/l		no
23/08/2017 MW3	Mercury	ICP-MS	Annual	<10.00) N/A	ug/l	0.75	no
23/08/2017 MW3	Manganese	ICP-MS	Annual	3386.00	N/A	ug/l		no
23/08/2017 MW3	Phosphate	konelab aquakem SOP 2061	Annual	0.01	. N/A	mg/I PO ₄	0.035	no
23/08/2017 MW3	Cyanide - Tot	Steam Distillation & Colourimetry	Annual	<1.00) N/A	ug/l	37.5	no
23/08/2017 MW3	Flouride	Ion Selective Electrode	Annual	0.69	N/A	mg/l		no
23/08/2017 MW3	Sulphate	konelab aquakem SOP 2062	Annual	9.72	N/A	mg/I SO ₄	187.5	no
23/08/2017 MW3	Total Alkalinity	konelab aquakem SOP 2064	Annual	53.09	N/A	mg/l		no
23/08/2017 MW3	Total Phosphorous	ICP-MS	Annual	0.01	N/A	mg/I P		no
23/08/2017 MW3	Total Disolved Solids	Filt./Evap. & Drying @ 105°C	Annual	78.00) N/A	mg/l		no
23/08/2017 MW3	E. Coli	Quanti-tray SOP 2090	Annual	5	5 N/A	MPN/100ml		no
23/08/2017 MW3	Total Coliforms	Quanti-tray SOP 2090	Annual	27	N/A	MPN/100ml		no

.+ where average indicates arithmetic mean

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

Table 2: Downgradient Groundwater monitoring results

	Sampla	_								Upward trend in yearly
Date of	Sample location			Monitoring	Maximum	Average				average pollutant concentration over last 5
sampling	reference	Parameter/ Substance	Methodology	frequency	Concentration	Concentration	unit	GTV's*	SW EQS	years of monitoring data
31/03/2017		Ammonia	konelab aguakem SOP 2057	Quarterly	1.61		mg/l	0.065-0.175	SW LQS	no
31/03/2017		Conductivity			752.00	-	uS/cm20°C	800-1875		-
31/03/2017		pH		Quarterly			pH units	800-1875		no
31/03/2017		рп Temperature	Electrometry SOP 2004 Temp. Probe	Quarterly	6.70		Deg. C			no
				Quarterly	14.60			24.407.5		no
31/03/2017		Chloride	konelab aquakem SOP 2065	Quarterly	31.91	29.50	.	24-187.5		no
31/03/2017		Dissolved Oxygen	Oxygen Meter SOP 2006	Quarterly	3.31		mg/I O2			no
31/03/2017		Potassium	ICP-MS	Quarterly	9.48		mg/l			no
31/03/2017		Sodium	ICP-MS	Quarterly	21.90	20.85	.	150		no
31/03/2017		Total Oxidised Nitrogen	konelab aquakem SOP 2058	Quarterly	3.00		mg/l			no
31/03/2017		Total Organic Carbon	Oxidation & Colourimetry	Quarterly	11.50		mg/l			no
31/03/2017	7 MW1	Phenols	Not Known	Quarterly	0.002	0.002	mg/l			no
23/08/2017	7 MW1	Boron	ICP-MS	Annual	0.08	N/A	mg/l	0.75		no
23/08/2017	7 MW1	Cadmium	ICP-MS	Annual	<20.00	N/A	ug/l			no
23/08/2017	7 MW1	Calcium	ICP-MS	Annual	104.60	N/A	mg/l			no
23/08/2017	7 MW1	Chromium	ICP-MS	Annual	<20.00	N/A	ug/l	37.5		no
23/08/2017	7 MW1	Copper	ICP-MS	Annual	<20.00	N/A	ug/l	1500		no
23/08/2017	7 MW1	Iron	ICP-MS	Annual	38.00		ug/l			no
23/08/2017	7 MW1	Lead	ICP-MS	Annual	<20.00	N/A	ug/l	18.75		no
23/08/2017	7 MW1	Magnesium	ICP-MS	Annual	23.20	N/A	mg/l			no
23/08/2017	7 MW1	Zinc	ICP-MS	Annual	<20.00	N/A	ug/l			no
23/08/2017	7 MW1	Mercury	ICP-MS	Annual	<10.00		ug/l	0.75		no
23/08/2017	7 MW1	Manganese	ICP-MS	Annual	925.00	N/A	ug/l			no
23/08/2017	7 MW1	Phosphate	konelab aquakem SOP 2061	Annual	0.01	N/A	mg/I PO ₄	0.035		no
23/08/2017	7 MW1	Cyanide - Tot	Steam Distillation & Colourimetry	Annual	<1.00	N/A	ug/l	37.5		no
23/08/2017	7 MW1	Flouride	Ion Selective Electrode	Annual	0.07	N/A	mg/l			no
23/08/2017	7 MW1	Sulphate	konelab aquakem SOP 2062	Annual	145.56	N/A	mg/l SO ₄	187.5		no
23/08/2017	7 MW1	Total Alkalinity	konelab aquakem SOP 2064	Annual	231.46		.mg/l			no
23/08/2017	7 MW1	Total Phosphorous	ICP-MS	Annual	0.01	N/A	mg/l P			no

Groundwater/Soll n	nonitoring template			Lic No:	W0070-01		Year	2017
23/08/2017 MW1	Total Disolved Solids	Filt./Evap. & Drying @ 105°C	Annual	286.00) N/A	mg/l		no
23/08/2017 MW1	E. Coli	Quanti-tray SOP 2090	Annual	() N/A	MPN/100ml		no
23/08/2017 MW1	Total Coliforms	Quanti-tray SOP 2090	Annual	6	6 N/A	MPN/100ml		no
28/11/2017 MW2	Ammonia	konelab aquakem SOP 2057	Quarterly	0.09	N/A	mg/l	0.065-0.175	no
28/11/2017 MW2	Conductivity	Electrometry SOP 2076	Quarterly	524.00) N/A	uS/cm20°C	800-1875	no
28/11/2017 MW2	pH	Electrometry SOP 2004	Quarterly	7.60	N/A	pH units		no
28/11/2017 MW2	Temperature	Temp. Probe	Quarterly	9.40	/	Deg. C		no
28/11/2017 MW2	Chloride	konelab aguakem SOP 2065	Quarterly	63.85	,	mg/l	24-187.5	no
28/11/2017 MW2	Dissolved Oxygen	Oxygen Meter SOP 2006	Quarterly	8.40	/	mg/I O2		no
28/11/2017 MW2	Potassium	ICP-MS	Quarterly	3.94		mg/l		no
28/11/2017 MW2	Sodium	ICP-MS	Quarterly	24.00		mg/l	150	no
28/11/2017 MW2	Total Oxidised Nitrogen	konelab aguakem SOP 2058	Quarterly	2.06		mg/l		no
28/11/2017 MW2	Total Organic Carbon	Oxidation & Colourimetry	Quarterly	0.70		mg/l		no
28/11/2017 MW2	Phenols	Not Known	Quarterly	0.002	1	mg/l		no
28/11/2017 MW2	Boron	ICP-MS	Annual	0.02		mg/l	0.75	no
28/11/2017 MW2	Cadmium	ICP-MS	Annual	<20.00		ug/l	0.75	no
28/11/2017 MW2	Calcium	ICP-MS	Annual	89.10	,	mg/l		no
28/11/2017 MW2	Chromium	ICP-MS	Annual	<20.00		ug/l	37.5	no
28/11/2017 MW2	Copper	ICP-MS	Annual	<20.00		ug/l	1500	no
28/11/2017 MW2	Iron	ICP-MS	Annual	304.00		ug/l	1500	no
28/11/2017 MW2	Lead	ICP-MS	Annual	<20.00	,	ug/l	18.75	no
28/11/2017 MW2	Magnesium	ICP-MS		12.30		mg/l	10.75	no
28/11/2017 MW2	Zinc	ICP-MS	Annual Annual	93.00		ug/l		no
28/11/2017 MW2	Mercury	ICP-MS	Annual	<10.00	,	.	0.75	no
28/11/2017 MW2 28/11/2017 MW2	,	ICP-MS	Annual	53.00		ug/l	0.75	no
28/11/2017 MW2	Manganese Phosphate	konelab aguakem SOP 2061				ug/l	0.025	no
			Annual	1.73		mg/I PO ₄	0.035	
28/11/2017 MW2	Cyanide - Tot	Steam Distillation & Colourimetry	Annual	8.00		ug/l	37.5	no
28/11/2017 MW2	Flouride	Ion Selective Electrode	Annual	0.11	,	mg/l		no
28/11/2017 MW2	Sulphate	konelab aquakem SOP 2062	Annual	127.40		mg/I SO ₄	187.5	no
28/11/2017 MW2	Total Alkalinity	konelab aquakem SOP 2064	Annual	192.48	,	mg/l		no
28/11/2017 MW2	Total Phosphorous	ICP-MS	Annual	0.04		mg/I P		no
28/11/2017 MW2	Total Disolved Solids	Filt./Evap. & Drying @ 105°C	Annual	243.00		mg/l		no
28/11/2017 MW2	E. Coli	Quanti-tray SOP 2090	Annual	3		MPN/100ml		no
28/11/2017 MW2	Total Coliforms	Quanti-tray SOP 2090	Annual	127	N/A	MPN/100ml		no
31/03/2017 MW4	Ammonia	konelab aquakem SOP 2057	Quarterly	0.10	0.05	mg/l	0.065-0.175	no
31/03/2017 MW4	Conductivity	Electrometry SOP 2076	Quarterly	112.00	80.25	uS/cm20°C	800-1875	no
31/03/2017 MW4	pH	Electrometry SOP 2004	Quarterly	5.90	5.65	pH units		no
31/03/2017 MW4	Temperature	Temp. Probe	Quarterly	14.00) 11.95	Deg. C		no
31/03/2017 MW4	Chloride	konelab aquakem SOP 2065	Quarterly	33.28	16.86	i mg/l	24-187.5	no
31/03/2017 MW4	Dissolved Oxygen	Oxygen Meter SOP 2006	Quarterly	9.34	8.33	mg/I O2		no
31/03/2017 MW4	Potassium	ICP-MS	Quarterly	2.20		mg/l		no
31/03/2017 MW4	Sodium	ICP-MS	Quarterly	16.60		mg/l	150	no
31/03/2017 MW4	Total Oxidised Nitrogen	konelab aquakem SOP 2058	Quarterly	3.52		mg/l		no
31/03/2017 MW4	Total Organic Carbon	Oxidation & Colourimetry	Quarterly	6.80		mg/l		no
31/03/2017 MW4	Phenols	Not Known	Quarterly	0.002		mg/l		no
23/08/2017 MW4	Boron	ICP-MS	Annual	0.01		mg/l	0.75	no
23/08/2017 MW4	Cadmium	ICP-MS	Annual	<20.00		ug/l	0.75	no
23/08/2017 MW4	Calcium	ICP-MS	Annual	20.00		mg/l		no
23/08/2017 MW4	Chromium	ICP-MS	Annual	<20.00		ug/l	37.5	no
23/08/2017 MW4	Copper	ICP-MS	Annual	<20.00	,	ug/l	1500	no
23/08/2017 MW4	Iron	ICP-MS	Annual	105.00		ug/l	1500	no

		nonitoring template			Lic No:	W0070-01		Year	2017	
23/08/2017	MW4	Lead	ICP-MS	Annual	<20.00	1	I/A ug/l	18.75	no	
23/08/2017	MW4	Magnesium	ICP-MS	Annual	<2.000	1	I/A mg/l		no	
23/08/2017	MW4	Zinc	ICP-MS	Annual	64.00	1	I/A ug/I		no	
23/08/2017	MW4	Mercury	ICP-MS	Annual	<10.00	1	I/A ug/l	0.75	no	
23/08/2017	MW4	Manganese	ICP-MS	Annual	62.00	1	I/A ug/l		no	
23/08/2017	MW4	Phosphate	konelab aquakem SOP 2061	Annual	<0.01	1	I/A mg/I PO ₄	0.035	no	
23/08/2017	MW4	Cyanide - Tot	Steam Distillation & Colourimetry	Annual	<1.00	1	I/A ug/I	37.5	no	
23/08/2017	MW4	Flouride	Ion Selective Electrode	Annual	0.05	1	I/A mg/l		no	
23/08/2017	MW4	Sulphate	konelab aquakem SOP 2062	Annual	3.88	1	I/A mg/I SO ₄	187.5	no	
23/08/2017	MW4	Total Alkalinity	konelab aquakem SOP 2064	Annual	4.08	1	I/A mg/l		no	
23/08/2017	MW4	Total Phosphorous	ICP-MS	Annual	0.01	1	I/A mg/I P		no	
23/08/2017	MW4	Total Disolved Solids	Filt./Evap. & Drying @ 105°C	Annual	17.00	1	I/A mg/I		no	
23/08/2017	MW4	E. Coli	Quanti-tray SOP 2090	Annual	219		I/A MPN/100ml		no	
23/08/2017	MW4	Total Coliforms	Quanti-tray SOP 2090	Annual	411	1	I/A MPN/100ml		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 GroundwaterMonitoring Guideline Template Report at the link provided and submit separately through ALDER as a licensee return or as otherwise instructed by the EPA.										

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)

Table 3: Soil results

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

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

Environmental Liabilities template

mental Elabilities template

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

			Commentary
1	ELRA initial agreement status	Not Required	
2	ELRA review status	SELECT	
3	Amount of Financial Provision cover required as determined by the latest ELRA	Specify	
4	Financial Provision for ELRA status	SELECT	
5	Financial Provision for ELRA - amount of cover	Specify	
6	Financial Provision for ELRA - type	SELECT	
7	Financial provision for ELRA expiry date	Enter expiry date	
8	Closure plan initial agreement status	SELECT	
9	Closure plan review status	SELECT	
10	Financial Provision for Closure status	SELECT	
11	Financial Provision for Closure - amount of cover	Specify	
12	Financial Provision for Closure - type	SELECT	
13	Financial provision for Closure expiry date	Enter expiry date	

Lic No:

W0070-01

2017

Year

	Environmental Management Programme/Continuous Improvement Programm	e template	Lic No:	W0070-01	Year	2017
	Highlighted cells contain dropdown menu click to view		Additional Information	1	_	
1	Do you maintain an Environmental Mangement System (EMS) for the site. If yes, please detail in additional information	Yes	Site pr	ocedures make up the EMS		
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
	Maintain/Improve landfill		Regular & frequent field gas		Improved Environmental
Reduction of emissions to Air	gas extraction regieme	Ongoing	balancing	Individual	Management Practices
			Ongoing analyses of		
			environmental monitoring		
	Prevent GW/SW		results to determine if		Improved Environmental
Groundwater protection	contamination	Ongoing	remedial action is necessary	Individual	Management Practices

Noise monitoring summary report	Lic No:	W0070-01	Year	2017
1 Was noise manifering a ligance requirement for the AFD pariod?		Ne	7	
1 Was noise monitoring a licence requirement for the AER period? If yes please fill in table N1 noise summary below		No		
	Noise			
2 Was noise monitoring carried out using the EPA Guidance note, including completion of the	Guidand			
"Checklist for noise measurement report" included in the guidance note as table 6?	<u>note NG</u>		-	
3 Does your site have a noise reduction plan		SELECT		
4 When was the noise reduction plan last updated?		Enter date		
5 Have there been changes relevant to site noise emissions (e.g. plant or operational changes noise survey?) since the las	SELECT		
			_	
Table N1: Noise monitoring summary				

Date of monitoring	Noise location (on site)	Noise sensitive location -NSL (if applicable)	LA _{eq}	LA ₉₀	LA ₁₀	LA _{max}	Tonal or Impulsive	If tonal /impulsive noise was identified was 5dB penalty	Comments (ex. main noise sources on site, & extraneous noise ex. road traffic)	Is <u>site c</u> ompliant 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?

SELECT

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

Any additional comments? (less than 200 words)

Resource Usage/Energy efficiency summary	Lic No:	W0070-01	Ŷ	Year 20:	17
			Additional information		
1 When did the site carry out the most recent energy efficiency audit? Please list the recommendation	ns in table 3 below	N/A			
	SEAI - Large		Cork County Council has		
Is the site a member of any accredited programmes for reducing energy usage/water conservation such as			an energy team in		
2 SEAI programme linked to the right? If yes please list them in additional information	<u>Network (LIEN)</u>	No	operation countywide		
Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please stat	e percentage in additional				
3 information		N/A			

Table R1 Energy usage on s	ite			
Energy Use	Previous year	Current year	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*
Total Energy Used (MWHrs)	2.697	1.795		
Total Energy Generated (MWHrs)	0	0		
Total Renewable Energy Generated (MWHrs)	0	0		
Electricity Consumption (MWHrs)	2.697	1.795		
Fossil Fuels Consumption:	N/A	N/A		
Heavy Fuel Oil (m3)				
Light Fuel Oil (m3)				
Natural gas (m3)				
Coal/Solid fuel (metric tonnes)				
Peat (metric tonnes)				
Renewable Biomass				
Renewable energy generated on site				
* where consumption of another can be compare	d to overall site producti	an alaasa aatar this in		taga ingragos ar d

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

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

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

Table R3 Waste Stream Summ					
	Total	Landfill	Incineration	Recycled	Other
Hazardous (Tonnes)					
Non-Hazardous (Tonnes)					

Table R4: Energy Audit fir	nding recommendations							
		Description of		Predicted energy				Status a
Date of audit	Recommendations	Measures proposed	Origin of measures	savings %	Implementation date	Responsibility	Completion date	commen
			SELECT					
			SELECT					
			SELECT					

	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:	W0070-01	Year	2017		
Complaints						
		Additional inform	nation			
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]			

Table	1 Complaints summary						
			Brief description of				
			complaint (Free txt <20	Corrective action< 20			Further
Date	Category	Other type (please specify)	words)	words	Resolution status	Resolution date	information
	SELECT				SELECT		
	SELECT				SELECT		
	SELECT				SELECT		
	SELECT				SELECT		
	SELECT				SELECT		
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 inform	ation								
Have any incidents of	occurred on site in the current rep	orting year? Please list all inci	idents for current reporting											
	year in Ta	able 2 below		No										

	ion on how to report and what	Millert in an inside at												
con	nstitutes an incident	What is an incident												
Table 2 Incidents su			7											
Table 2 Incidents su	immary		Incident			Other	Activity in				Preventative		1	1
			category*please refer to			cause(please	progress at			Corrective action<20			Resolution	Likelihood of
Date of occurrence	Incident nature	Location of occurrence	• • •	Receptor	Cause of incident			Communication			words	Resolution status		reoccurence
	SELECT	SELECT		SELECT	SELECT				SELECT	words	worus	SELECT	uate	SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT				SELECT			SELECT		SELECT
	SELECT	SELECT		SELECT	SELECT				SELECT			SELECT		SELECT
	SELECT	SELECT		SELECT	SELECT				SELECT			SELECT		SELECT
	SELECT	SELECT		SELECT	SELECT				SELECT			SELECT		SELECT
Total number of	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
incidents current														
vear		0												
Total number of		0												
incidents previous														
vear		0												
% reduction/														
increase		0												
mercuse	1	0												

WASTE SUMMARY	Lic No:	W0070-01	Year	2017
 SECTION A-PRTR ON SITE WASTE TREATMENT AND WASTE TRANSFERS TAB- TO BE COMPLETED BY A	LL IPPC AND WASTE FACILITIES	PRTR facility logon	dropdowi	n list click to see options

SECTION B- WASTE ACCEPTED ONTO SITE-TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES		
		Additional Information
Were any wastes <u>accepted onto</u> your site for recovery or disposal or treatment prior to recovery or disposal within the boundaries of your facility ?; (waste generated within your 1 boundaries is to be captured through PRTR reporting)	No	
f ves 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	No	
3 Was waste accepted onto your site that was generated outside the Republic of Ireland? If yes please state the quantity in tonnes in additional information	No	

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

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

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?

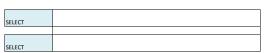
SECTION D-TO BE COMPLETED BY LANDFILL SITES ONLY

Table 2 Waste type and tonnage-landfill only							
			Rema				

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

Table 3 General information-Landfill only

Area ID	Date landfilling commenced Date landfilling ceased Currently landfilling Private or Public Operated	Date landfilling ceased	Currently landfilling			Predicted date to cease landfilling	Licence permits asbestos	Is there a separate cell for asbestos?		Lined disposal area occupied by waste		Comments on liner type
							SELECT UNIT	SELECT UNIT	SELECT UNIT			
N/A - Landfill Closed												





WASTE SUMMARY					Lic No:	W0070-01		Year	2017
Table 4 Environmen	ntal monitoring-landfill only	Landfill Manual-Monitoring Sta	ndards						
	Was leachate monitored in compliance with LD standard in reporting year	Was Landfill Gas monitored in compliance with LD standard in reporting year	Was SW monitored in compliance with LD standard in reporting year	Have GW trigger levels been established	Were emission limit values agreed with the Agency (ELVs)	Was topography of the site surveyed in reporting year	Has the statement under S53(A)(5) of WMA been submitted in reporting year	Comments	
N/A	Yes Manual linked above for relevant Landfil	Yes	Yes	Yes	Yes	No	No		
Table 5 Capping-Lar	Area with temporary cap			Area with waste that should be permanently					
SELECT UNIT	SELECT UNIT	Area with final cap to LD Standard m2 ha, a	Area capped other	capped to date under licence		Comments			
N/A - Landfill Closed]		
*please note this includes	s daily cover area								
Table 6 Leachate-La	andfill only								
	treated in a Waste Water Treatment Pla					N/A	I		
Is leachate released to su	urface water? If yes please complete leac	hate mass load information belo	N			No	1		
Volume of leachate in		Leachate (COD) mass load	Leachate (NH4) mass	Leachate (Chloride)		Specify type of leachate		1	

	reporting year(m3)	Leachate (BOD) mass load (kg/annum)	load (kg/annum)	mass load kg/annum		treatment	Comments
Γ	0				No		

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			Was surface emissions monitoring performed during the reporting	
by LFG System m3	Power generated (MW / KWh)	Used on-site or to national grid	year?	Comments
CH ₄ - 5267	0	0	No	



Guidance to completing the PRTR workbook

PRTR Returns Workbook

Version 1.1.19

REFERENCE YEAR 2017

1. FACILITY IDENTIFICATION

Parent Company Name	Cork County Council
Facility Name	Benduff Landfill Site
PRTR Identification Number	W0070
Licence Number	W0070-01

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

Address 1	
Address 2	Rosscarbery
Address 3	
Address 4	
	Cork
Country	
Coordinates of Location	-9.06927 51.5933
River Basin District	IESW
NACE Code	
Main Economic Activity	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	Mairead Hales
AER Returns Contact Email Address	Mairead.Hales@CorkCoCo.ie
AER Returns Contact Position	Executive Engineer
AER Returns Contact Telephone Number	021 4276891 (Ext. 7045)
AER Returns Contact Mobile Phone Number	086 6018493
AER Returns Contact Fax Number	023 8858814
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	1
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name					
5(d)	Landfills					
5(c)	Installations for the disposal of non-hazardous waste					
50.1	General					
3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)						
Is it applicable?	No					
Have you been granted an exemption ?						
If applicable which activity class applies (as per						
Schedule 2 of the regulations) ?						
Is the reduction scheme compliance route being						
used ?						

4. WASTE IMPORTED/ACCEPTED ONTO SITE

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

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

4.1 RELEASES TO AIR Link to previous years emissions data

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

020110111102010110120110110120									
	Please enter all quantities in this section in KGs								
POLLUTANT			I	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
01	Methane (CH4)	С	OTH	LandGEM Modelling	C	0.0 17	8984.18	0.0	178984.18

| PRTR# : W0070 | Facility Name : Benduff Landfill Site | Filename : W0070-01 2017AER.xlsx | Return Year : 2017 |

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

SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO AIR				Please enter all quantities in this section in KGs					
POLLUTANT		METHOD			QUANTITY				
		Method Used							
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidenta	l) KG/Year	F (Fugitive) KG/Year
					0.0)	0.0	0.0	0.0

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

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

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

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

Additional Data Requested from Landfill operators										
For the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide summary data on landfill gas (Methane) flared or utilised on their facilities to accompany the figures for total methane generated. Operators should only report their Net methane (CH4) emission to the environment under T(total) KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:										
Landfill:	Benduff Landfill Site									
Please enter summary data on the quantities of methane flared and / or utilised			Met	hod Used						
	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)	182589.18	с	отн	Landgem	N/A					
Methane flared		С	OTH	Landfill Gas Survey		(Total Flaring Capacity)				
Methane utilised in engine/s	0.0				0.0	(Total Utilising Capacity)				
Net methane emission (as reported in Section A above)	178984.18	с	отн	LandGEM Modelling	N/A					