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.

2016

W0070-01

Benduff Landfill Site

Benduff, Rosscarbery, Co. Cork

3821

Installation for the disposal of non hazardous

(52E, 53N)

# Description of Activities on Site during 2016:

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 2016 was the extraction of gas from the closed landfill (extracted gas is flared on-site).

## **Exceedances of Licence Limits during 2016:**

None.

# **Overview of Licence Compliance during 2016:**

There was no non-compliance issued against the licence in 2016.

### **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: 30/03/2017

	AIR-summary	template				Lic No:	W0070-01		Year	2016	6
	Answer all question	ons and complete all table	s where relevant					Additional informati			
1	reporting year ar		tions. If <b>you do not</b>	have licenced em	and A2 below for the current issions and do not complete the tables	Yes	Current flare insta 500 cubic meter pe	•	on ted open flare of 50- issions monitoring is		
	Doriodi	c/Non-Continuous N	Aonitoring								
	Periodic	c/Non-Continuous N	nomitoring								
2	Are there any resu	ults in breach of licence re	quirements? If yes ple TableA1 below		etails in the comment section of	N/A					
3		g carried out in accordanc d using the basic air monit	_	Basic air monitoring checklist	AGN2	N/A					
	Table A1: Lice	nsed Mass Emission	s/Ambient data-	periodic monit	oring (non-continuous)						
	Emission reference no:	Parameter/ Substance	Frequency of Monitoring	ELV in licence or any revision therof	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence limit	Method of analysis	Annual mass load (kg)	Comments - reason for change in % mass load from previous year if applicable
		SELECT			SELECT		SELECT	SELECT	SELECT		
		SELECT			SELECT		SELECT	SELECT	SELECT		
		SELECT			SELECT		SELECT	SELECT	SELECT		
		SELECT			SELECT		SELECT	SELECT	SELECT		<u>]</u>
	Note 1: Volumetri	flow shall be included as	a reportable paramet	eı							
		Continuous N	Monitoring								
4		ry out continuous air emis	sions monitoring?		below in Table A2 and compare	No					
5	Did continuous mo	onitoring equipment exper	ience downtime? If ye	es please record do	wntime in table A2 below	SELECT					

	AIR-summary template	Lic No:	W0070-01	Year	2016
6	Do you have a proactive service agreement for each piece of continuous monitoring equipment?	SELECT			
7	Did your site experience any abatement system bypasses? If yes please detail them in table A3 below	SELECT			

# Table A2: Summary of average emissions -continuous monitoring

Emission	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								
	SELECT			SELECT	SELECT					
	SELECT				SELECT					
	SELECT				SELECT					
	SELECT				SELECT					
	SELECT				SELECT					

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

Table A3: Abatement system bypass reporting table

**Bypass protocol** 

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

<sup>\*</sup> this should include all dates that an abatement system bypass occurred

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

<sup>\*\*</sup> 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

IR-summary	template				Lic No:	W0070-01		Year	201			
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							
					SELECT							
					SELECT							
Table A5:	Solvent Mass Balan	ce summary										
	(I) Inputs (kg)		(O) Outputs (kg)									
Solvent	(I) Inputs (kg)	Organic solvent emission in waste	Solvents lost in water (kg)	Collected waste solvent (kg)	Fugitive Organic Solvent (kg)	Solvent released in other ways e.g.	Solvents destroyed onsite through	Total emission of Solvent to air (kg)				

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

Lic No: W0070-01 Year 2016

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

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

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

### Table W1 Storm water monitoring

	able WI Stor	m water monitoring								
	Location				ELV or trigger	Licence				
Location	relative to site	PRTR Parameter	Licenced Parameter	Monitoring	level in licence	Compliance	Measured value	Unit of	Compliant with	Comments
reference		rkikraiailietei	Licenced Farameter	date	or any revision		ivieasureu value	measurement	licence	Comments
	activities				thereof*	criteria				
SW1	upstream		pH	20/04/2016	N/A	N/A	6.30	pH units	yes	
SW1	upstream		Conductivity	20/04/2016	N/A	N/A	112.00	μS/cm @20oC	yes	
SW1	upstream		Dissolved Oxygen	20/04/2016	N/A	N/A	7.20	mg/L	yes	
SW1	upstream		Ammonia (as N)	20/04/2016	N/A	N/A	0.04	mg/L	yes	
SW1	upstream		BOD	20/04/2016	N/A	N/A	1.00	mg/L	yes	
SW1	upstream		COD	20/04/2016	N/A	N/A	2.00	mg/L	yes	
SW1	upstream	Chlorides (as Cl)		20/04/2016	N/A	N/A	23.43	mg/L	yes	
SW1	upstream		Suspended Solids	20/04/2016	N/A	N/A	2.00	mg/L	yes	
SW1	upstream		Boron	21/07/2016	N/A	N/A	0.01	mg/L	yes	
SW1	upstream		Calcium	21/07/2016	N/A	N/A	9.07	mg/L	yes	
SW1	upstream	Cadmium and compounds (as Cd)		21/07/2016	N/A	N/A	<20.00	μg/L	yes	
SW1	upstream	Chromium and compounds (as Cr)		21/07/2016	N/A	N/A	<20.00	μg/L	yes	
SW1	upstream	Copper and compounds (as Cu)		21/07/2016	N/A	N/A	<20.00	μg/L	yes	
SW1	upstream		Iron	21/07/2016	N/A	N/A	29.00	μg/L	yes	
SW1		Mercury and compounds (as Hg)		21/07/2016	N/A	N/A	<10.00	mg/L	yes	
SW1	upstream	,	Potassium	21/07/2016	N/A	N/A	0.84	mg/L	yes	
SW1	upstream		Magnesium	21/07/2016	N/A	N/A	3.53	mg/L	yes	
SW1	upstream		Manganese (as Mn)	21/07/2016	N/A	N/A	<20.00	μg/L	yes	
SW1	upstream		Sodium	21/07/2016	N/A	N/A	13.30	mg/L	yes	
SW1		Nickel and compounds (as Ni)		21/07/2016	N/A	N/A	<20.00	μg/L	yes	
SW1	upstream	Total phosphorus		21/07/2016	N/A	N/A	<0.01	mg/L	yes	
SW1	upstream	Lead and compounds (as Pb)		21/07/2016	N/A	N/A	<20.00	μg/L	yes	
SW1		Lead and compounds (as Fb)	Sulphate	21/07/2016	N/A	N/A	7.48	mg/L SO₄	'	
	upstream		'						yes	
SW1	upstream		Total Oxidised Nitrogen (TON)	21/07/2016	N/A	N/A	1.27	mg/L N	yes	
SW1		Zinc and compounds (as Zn)		21/07/2016	N/A	N/A	110.00	μg/L	yes	
SW1	upstream		Alkalinity	21/07/2016	N/A	N/A	21.11	mg/L	yes	
SW1	upstream		Ortho-phosphate (as PO4)	21/07/2016	N/A	N/A	0.02	mg/L PO <sub>4</sub>	yes	
SW4	downstream		pH	20/04/2016	N/A	N/A	7.70	pH units	yes	
SW4	downstream		Conductivity	20/04/2016	N/A	N/A	309.00	μS/cm @20oC	yes	
SW4	downstream		Dissolved Oxygen	20/04/2016	N/A	N/A	8.19	mg/L	yes	
SW4	downstream		Ammonia (as N)	20/04/2016	N/A	N/A	0.02	mg/L	yes	
SW4	downstream		BOD	20/04/2016	N/A	N/A	1.00	mg/L	yes	
SW4	downstream		COD	20/04/2016	N/A	N/A	7.00	mg/L	yes	
SW4	downstream	Chlorides (as Cl)		20/04/2016	N/A	N/A	28.85	mg/L	yes	
SW4	downstream		Suspended Solids	20/04/2016	N/A	N/A	11.00	mg/L	yes	
SW4	downstream		Boron	25/11/2016	N/A	N/A	0.03	mg/L	yes	
SW4	downstream		Calcium	25/11/2016	N/A	N/A	50.40	mg/L	yes	
SW4		Cadmium and compounds (as Cd)		25/11/2016	N/A	N/A	<20.00	μg/L	yes	
SW4	downstream	Chromium and compounds (as Cr)		25/11/2016	N/A	N/A	<20.00	μg/L	yes	
SW4	downstream	Copper and compounds (as Cu)		25/11/2016	N/A	N/A	<20.00	μg/L	yes	
SW4	downstream		Iron	25/11/2016	N/A	N/A	35.00	μg/L	yes	
SW4	downstream	Mercury and compounds (as Hg)		25/11/2016	N/A	N/A	<10.00	mg/L	yes	
SW4	downstream		Potassium	25/11/2016	N/A	N/A	6.54	mg/L	yes	
SW4	downstream		Magnesium	25/11/2016	N/A	N/A	6.52	mg/L	yes	
SW4	downstream		Manganese (as Mn)	25/11/2016	N/A	N/A	<20.00	μg/L	yes	
SW4	downstream		Sodium	25/11/2016	N/A	N/A	15.60	mg/L	yes	
SW4	downstream	Nickel and compounds (as Ni)		25/11/2016	N/A	N/A	<20.00	μg/L	yes	
SW4	downstream	Total phosphorus		25/11/2016	N/A	N/A	0.05	mg/L	yes	
SW4	downstream	Lead and compounds (as Pb)		25/11/2016	N/A	N/A	<20.00	μg/L	yes	
SW4	downstream		Sulphate	25/11/2016	N/A	N/A	50.91	mg/L SO <sub>4</sub>	yes	
SW4	downstream		Total Oxidised Nitrogen (TON)	25/11/2016	N/A	N/A	6.81	mg/L N	yes	
SW4		Zinc and compounds (as Zn)		25/11/2016	N/A	N/A	<20.00	μg/L	yes	
SW4	downstream		Alkalinity	25/11/2016	N/A	N/A	155.57	mg/L	yes	
SW4	downstream		Ortho-phosphate (as PO4)	25/11/2016	N/A	N/A	0.14	mg/L PO₄	yes	
SW5	downstream		pH	20/04/2016	N/A	N/A	7.40	pH units	yes	
SW5	downstream		Conductivity	20/04/2016	N/A	N/A	119.00	μS/cm @20oC	yes	
			,						· · · · · · · · · · · · · · · · · · ·	
SW5	downstream		Dissolved Oxygen	20/04/2016	N/A	N/A	7.93	mg/L	yes	

AER Mo	onitoring returns s	ummary template-WATER/WAS	TEWATER(SEWER)			Lic No:	W0070-01		Year	2016
SW	downstream		Ammonia (as N)	20/04/2016	N/A	N/A	0.02	mg/L	yes	
SW:	5 downstream		BOD	20/04/2016	N/A	N/A	<1.00	mg/L	yes	
SW:	5 downstream		COD	20/04/2016	N/A	N/A	<1.00	mg/L	yes	
SW	downstream	Chlorides (as Cl)		20/04/2016	N/A	N/A	24.23	mg/L	yes	
SW	downstream		Suspended Solids	20/04/2016	N/A	N/A	2.00	mg/L	yes	
SW	downstream		Boron	25/11/2016	N/A	N/A	0.02	mg/L	yes	
SW	downstream		Calcium	25/11/2016	N/A	N/A	15.60	mg/L	yes	
SW	downstream	Cadmium and compounds (as Cd)		25/11/2016	N/A	N/A	<20.00	μg/L	yes	
SW	5 downstream	Chromium and compounds (as Cr)		25/11/2016	N/A	N/A	<20.00	μg/L	yes	
SW	downstream	Copper and compounds (as Cu)		25/11/2016	N/A	N/A	<20.00	μg/L	yes	
SW	downstream		Iron	25/11/2016	N/A	N/A	44.00	μg/L	yes	
SW	downstream	Mercury and compounds (as Hg)		25/11/2016	N/A	N/A	<10.00	mg/L	yes	
SW	downstream		Potassium	25/11/2016	N/A	N/A	2.65	mg/L	yes	
SW	downstream		Magnesium	25/11/2016	N/A	N/A	3.52	mg/L	yes	
SW	downstream		Manganese (as Mn)	25/11/2016	N/A	N/A	21.00	μg/L	yes	
SW	downstream		Sodium	25/11/2016	N/A	N/A	13.80	mg/L	yes	
SW	downstream	Nickel and compounds (as Ni)		25/11/2016	N/A	N/A	<20.00	μg/L	yes	
SW	downstream	Total phosphorus		25/11/2016	N/A	N/A	0.02	mg/L	yes	
SW:	downstream	Lead and compounds (as Pb)		25/11/2016	N/A	N/A	<20.00	μg/L	yes	
SW	downstream		Sulphate	25/11/2016	N/A	N/A	14.20	mg/L SO <sub>4</sub>	yes	ı
SW	downstream		Total Oxidised Nitrogen (TON)	25/11/2016	N/A	N/A	2.45	mg/L N	yes	
SW	5 downstream	Zinc and compounds (as Zn)		25/11/2016	N/A	N/A	46.00	μg/L	yes	
SW	downstream		Alkalinity	25/11/2016	N/A	N/A	56.27	mg/L	yes	
SW:	downstream		Ortho-phosphate (as PO4)	25/11/2016	N/A	N/A	0.03	mg/L PO <sub>4</sub>	yes	

<sup>\*</sup>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		
	checklists for Quality of Aqueous Monitoring Data Reported to the EPA? If		
-	no please detail what areas require improvement in additional information External /Internal Lab Quality Assessment of		
4	box <u>checklist</u> <u>results checklist</u>	Yes	

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

Emission reference no:	Emission released to	Parameter/ SubstanceNote 1		Frequency of monitoring	Averaging period	ELV or trigger values in licence or any revision therof <sup>Note 2</sup>	Licence Compliance criteria	Measured value		Compliant with licence	Method of analysis	Procedural	Annual mass load (kg)	Comments
	SELECT	SELECT	discrete		SELECT		SELECT		SELECT	SELECT	SELECT	SELECT		

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

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

### **Continuous monitoring**

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

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

 $7 \ \mathsf{Do} \ \mathsf{you} \ \mathsf{have} \ \mathsf{a} \ \mathsf{proactive} \ \mathsf{service} \ \mathsf{contract} \ \mathsf{for} \ \mathsf{each} \ \mathsf{piece} \ \mathsf{of} \ \mathsf{continuous} \ \mathsf{monitoring} \ \mathsf{equipment} \ \mathsf{on} \ \mathsf{site} ?$ 

8 Did abatement system bypass occur during the reporting year? If yes please complete table W5 below

Table W4: Summary of average emissions -continuous monitoring

SELECT	
SELECT	
SELECT	

AER Monito	ring returns sı	ummary template-WATER/WAST	TEWATER(SEWER)			Lic No:	W0070-01		Year	2016	
								0/			
								% change +/- from previous reporting	Monitoring	Number of ELV	
Emission	Emission		ELV or trigger values in licence or	Averaging	Compliance	Units of	Annual Emission for	year	Equipment	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		action*		When was this report submitted?
					SELECT	

<sup>\*</sup>Measures taken or proposed to reduce or limit bypass frequency

Bund/Pipeline tes	sting template				Lic No:	W0070-01		Year	2010	6				
Bund testing	Т	dropdown menu cli	ck to see options				Additional information							
	ur licence to undertake in	ntegrity testing on bunds and conf	•	olease fill out table B1 below	w listing all new bunds									
and containment struc	ctures on site, in addition t	to all bunds which failed the inte	grity test-all bunding struct	ures which failed including										
		ds outside the licenced testing po	eriod(mobile bunds and cher	nstore included)		Yes								
	y testing frequency period					3 years								
Does the site maintain 'Chemstore" type units		erground pipelines (including stor	mwater and foul), Tanks, sur	nps and containers? (conta	iners refers to	No								
How many bunds are o						1		+						
		hin the required test schedule?				1								
How many mobile bund	ds are on site? ncluded in the bund test s	schadula?				0 N/A		_						
		ted within the required test sche	dule?			N/A		+						
	ite are included in the inte					N/A								
	mps are integrity tested w ntegrity failures in table B					N/A		1						
	ibers have high level liquid					Yes		7						
f yes to Q11 are these	failsafe systems included	in a maintenance and testing pro	gramme?			Yes		1						
s the Fire Water Reten	ntion Pond included in you	ur integrity test programme?				N/A		1						
Tabl	le B1: Summary details of	bund /containment structure into	egrity test	1										
														Results of
									Integrity reports maintained on				Scheduled date	retest(if in current
Bund/Containment structure ID	Туре	Specify Other type	Product containment	Actual capacity	Capacity required*	Type of integrity test	Other test type	Test date	site?	Results of test	Integrity test failure explanation <50 words	Corrective action taken	for retest	reporting ye
	SELECT	opening camer type			on poorly required	SELECT			SELECT	SELECT		SELECT		
	SELECT					SELECT			SELECT	SELECT		SELECT		
	ply with 25% or 110% containment re een carried out in accorda	rule asdetailed in your licence Ince with licence requirements an	d are all structures tested				Commentary	П						
n line with BS8007/EP/				bunding and storage guide	ines	SELECT								
	systems to remote contain	nment systems tested? h integrity and available volume?				SELECT SELECT		+						
Are criainieis/ cransier.	systems compilant in boti	ii iiitegiity and avallable volume:				SEECI		_1						
		7												
Pipeline/undergro	und structure testing	1						П						
		ntegrity testing * on underground												
		which failed the integrity test ar	nd all which have not been t	ested withing the integrity	test period as specified	SELECT SELECT		1						
	y testing frequency period testing means water tight	d ness testing for process and foul	pipelines (as required under	your licence)		SELECT		_						
Table	B2: Summary details of pi	ipeline/underground structures in	ntegrity test									Т		
				Type of secondary										
				containment										
			Does this structure have			Integrity reports		Integrity test failure explanation	Corrective action	Scheduled date	Results of retest(if in current			
						maintained on site?	Results of test	<50 words	taken	for retest	reporting year)			
Structure ID	Type system	Material of construction:	Secondary containment?		Type integrity testing	mamitamed on site:								
Structure ID	Type system SELECT	Material of construction: SELECT		SELECT	Type integrity testing SELECT	SELECT SELECT	SELECT				SELECT	1		
Structure ID			Secondary containment?	SELECT							SELECT			
Structure ID			Secondary containment?	SELECT							SELECT			
Structure ID			Secondary containment?	SELECT							SELECT			
Structure ID			Secondary containment?	SELECT							SELECT			
Structure ID		SELECT	Secondary containment? SELECT		SELECT						SELECT			
Structure ID		SELECT	Secondary containment?		SELECT						SELECT			

Groundwater/Soil monitoring template	Lic No:	W0070-01	Year 2016	
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	Comr	ments
Are you required to carry out groundwater monitoring as part of your licence requirements?	yes	Please provide an interpretation of groundwater
2 Are you required to carry out soil monitoring as part of your licence requirements?	no	monitoring data in the interpretation box below or if you
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 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 G8) and submit separately through ALDER as a licensee return AND answer questions 5-12 below.  Groundwater monitoring template	yes	GW quality is in line with previous years. Groundwater quality is impacted by the presence of a very weak leachate in the immediate vicinity of the site. However, the impact reduces with distance away from the landfill most likely as a result of dilution affects. Monitoring
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 surface water quality
6 Have actions been taken to address contamination issues?If yes please summarise remediation strategies proposed/undertaken for the site	yes	downstream of the landfill.  The Tier 3 Risk Assessment indicates that the landfill site.
<sup>7</sup> Please specify the proposed time frame for the remediation strategy	N/A	does not present a significant environmental risk to off- site receptors and reccommends that the groundwater
<sup>8</sup> Is there a licence condition to carry out/update ELRA for the site?	no	monitoring programme should continue to be used to
<sup>9</sup> Has any type of risk assesment been carried out for the site?	yes	determine if the impacts on groundwater are reducing over time as leachate generation further reduces.
Has a Conceptual Site Model been developed for the site?	yes	Monitoring wells MW-2 and MW-3 are used as compliance
<sup>11</sup> Have potential receptors been identified on and off site?	yes	monitoring wells. Compliance monitoring is undertaken for pCOCs ammonia, chloride and manganese.
12 Is there evidence that contamination is migrating offsite?	yes	

### **Table 1: Upgradient Groundwater monitoring results**

Tubic 1. Op	Januarent G	Cunuwater monitoring	Tesuits			1	1	I		
Date of	Sample location			Monitorina	Maximum	Averege				Upward trend in pollutant concentration over last 5
sampling	reference	Parameter/ Substance	Methodology	Monitoring frequency	Concentration++	Average Concentration+	unit	GTV's*	SW EQS	years of monitoring data
21/07/2016			konelab aguakem SOP 2057							
21/07/2016	IVIVV3	Ammonia	Koneiab aquakem SOP 2057	Quarterly	0.17		mg/l	0.065-0.175		no
21/07/2016	MW3	Conductivity	Electrometry SOP 2076	Quarterly	209.00	185.50	uS/cm20°C	800-1875		no
21/07/2016	MW3	pH	Electrometry SOP 2004	Quarterly	6.10	6.03	pH units			no
21/07/2016	MW3	Temperature	Temp. Probe	Quarterly	14.40	11.43	Deg. C			no
21/07/2016	MW3	Chloride	konelab aquakem SOP 2065	Quarterly	35.62	30.70	mg/l	24-187.5		no
21/07/2016	MW3	Dissolved Oxygen	Oxygen Meter SOP 2006	Quarterly	4.50	3.42	mg/l O2			no
21/07/2016	MW3	Potassium	ICP-MS	Quarterly	2.87	2.31	mg/l			no
21/07/2016	MW3	Sodium	ICP-MS	Quarterly	30.50	21.08	mg/l	150		no
21/07/2016	MW3	Total Oxidised Nitrogen	konelab aquakem SOP 2058	Quarterly	0.59	0.53	mg/l			no
21/07/2016	MW3	Total Organic Carbon	Oxidation & Colourimetry	Quarterly	10.00	6.10	mg/l			no
21/07/2016	MW3	Phenols	Not Known	Quarterly	0.018	0.008	mg/l			no
21/07/2016	MW3	Boron	ICP-MS	Annual	0.10	N/A	mg/l	0.75		no
21/07/2016	MW3	Cadmium	ICP-MS	Annual	<20.00	N/A	ug/l			no
21/07/2016	MW3	Calcium	ICP-MS	Annual	13.00	N/A	mg/l			no
21/07/2016	MW3	Chromium	ICP-MS	Annual	<20.00	N/A	ug/l	37.5		no

Groundwa	iter/Soil moi	nitoring template			Lic No:	W0070-01		Year	2016
21/07/2016	MW3	Copper	ICP-MS	Annual	<20.00	N/A	ug/l	1500	no
21/07/2016	MW3	Iron	ICP-MS	Annual	2839.00	N/A	ug/l		no
21/07/2016	MW3	Lead	ICP-MS	Annual	<20.00	N/A	ug/l	18.75	no
21/07/2016	MW3	Magnesium	ICP-MS	Annual	4.26	N/A	mg/l		no
21/07/2016	MW3	Zinc	ICP-MS	Annual	70.00	N/A	ug/l		no
21/07/2016	MW3	Mercury	ICP-MS	Annual	<10.00	N/A	mg/l	0.00075	no
21/07/2016	MW3	Manganese	ICP-MS	Annual	2870.00	N/A	ug/l		no
21/07/2016	MW3	Phosphate	konelab aquakem SOP 2061	Annual	0.03	N/A	mg/I PO <sub>4</sub>	0.035	no
21/07/2016	MW3	Cyanide - Tot	Steam Distillation & Colourimetry	Annual	1.00	N/A	ug/l	37.5	no
21/07/2016	MW3	Flouride	Ion Selective Electrode	Annual	0.02	N/A	mg/l		no
21/07/2016	MW3	Sulphate	konelab aquakem SOP 2062	Annual	10.25	N/A	mg/I SO <sub>4</sub>	187.5	no
21/07/2016	MW3	Total Alkalinity	konelab aquakem SOP 2064	Annual	48.22	N/A	mg/l		no
21/07/2016	MW3	Total Phosphorous	ICP-MS	Annual	0.02	N/A	mg/I P		no
21/07/2016	MW3	Total Disolved Solids	Filt./Evap. & Drying @ 105°C	Annual	-	N/A	mg/l		no
21/07/2016	MW3	E. Coli	Quanti-tray SOP 2090	Annual	0	N/A	MPN/100ml		no
21/07/2016	MW3	Total Coliforms	Quanti-tray SOP 2090	Annual	6	N/A	MPN/100ml		no

<sup>+</sup> where average indicates arithmetic mean

Table 2: Downgradient Groundwater monitoring results

Table 2: Down	ngradient Grou	ndwater monitoring results	1		ı		I	1		In the second
										Upward trend in yearly
D	Sample									average pollutant
Date of	location	B . / O		Monitoring	Maximum	Average		OT\# *	014 500	concentration over last 5
sampling	reference	Parameter/ Substance	Methodology	frequency	Concentration	Concentration	******	GTV's*	SW EQS	years of monitoring data
21/07/2016		Ammonia	konelab aquakem SOP 2057	Quarterly	2.28		mg/l	0.065-0.175		no
21/07/2016		Conductivity	Electrometry SOP 2076	Quarterly	675.00		uS/cm20°C	800-1875		no
21/07/2016	MW1	pH	Electrometry SOP 2004	Quarterly	6.70	6.48	pH units			no
21/07/2016	1	Temperature	Temp. Probe	Quarterly	14.50		Deg. C			no
21/07/2016	MW1	Chloride	konelab aquakem SOP 2065	Quarterly	37.35	32.76		24-187.5		no
21/07/2016	MW1	Dissolved Oxygen	Oxygen Meter SOP 2006	Quarterly	7.39	3.57	mg/I O2			no
21/07/2016	MW1	Potassium	ICP-MS	Quarterly	8.50	6.39	mg/l			no
21/07/2016	MW1	Sodium	ICP-MS	Quarterly	21.90	18.90	mg/l	150		no
21/07/2016	MW1	Total Oxidised Nitrogen	konelab aquakem SOP 2058	Quarterly	3.47	1.75	mg/l			no
21/07/2016	MW1	Total Organic Carbon	Oxidation & Colourimetry	Quarterly	3.70	2.80	mg/l			no
21/07/2016	MW1	Phenols	Not Known	Quarterly	0.002	0.004	mg/l			no
21/07/2016	MW1	Boron	ICP-MS	Annual	0.06	N/A	mg/l	0.75		no
21/07/2016	MW1	Cadmium	ICP-MS	Annual	<20.00	N/A	ug/l			no
21/07/2016	MW1	Calcium	ICP-MS	Annual	79.60	N/A	mg/l			no
21/07/2016	MW1	Chromium	ICP-MS	Annual	<20.00	N/A	ug/l	37.5		no
21/07/2016	MW1	Copper	ICP-MS	Annual	<20.00	N/A	ug/l	1500		no
21/07/2016	MW1	Iron	ICP-MS	Annual	109.00	N/A	ug/l			no
21/07/2016	MW1	Lead	ICP-MS	Annual	<20.00	N/A	ug/l	18.75		no
21/07/2016	MW1	Magnesium	ICP-MS	Annual	19.00	N/A	mg/l			no
21/07/2016	MW1	Zinc	ICP-MS	Annual	386.00	N/A	ug/l			no
21/07/2016	MW1	Mercury	ICP-MS	Annual	<10.00	N/A	mg/l	0.00075		no
21/07/2016	MW1	Manganese	ICP-MS	Annual	1263.00	N/A	ug/l			no
21/07/2016	MW1	Phosphate	konelab aquakem SOP 2061	Annual	0.04	N/A	mg/I PO <sub>4</sub>	0.035		no
21/07/2016	MW1	Cyanide - Tot	Steam Distillation & Colourimetry	Annual	18.00	N/A	ug/l	37.5		no
21/07/2016	MW1	Flouride	Ion Selective Electrode	Annual	0.09		mg/l			no
21/07/2016	MW1	Sulphate	konelab aquakem SOP 2062	Annual	116.97	N/A	mg/I SO <sub>4</sub>	187.5		no
21/07/2016	MW1	Total Alkalinity	konelab aquakem SOP 2064	Annual	186.09	N/A	mg/l			no

<sup>.++</sup> maximum concentration indicates the maximum measured concentration from all monitoring results produced during the reporting yea

Groundwater/Soil r	monitoring template			Lic No: W0	070-01	Year	2016
21/07/2016 MW1	Total Phosphorous	ICP-MS	Annual	0.01	N/A mg/l P		no
21/07/2016 MW1	Total Disolved Solids	Filt./Evap. & Drying @ 105°C	Annual	-	N/A mg/I		no
21/07/2016 MW1	E. Coli	Quanti-tray SOP 2090	Annual	0	N/A MPN/100ml		no
21/07/2016 MW1	Total Coliforms	Quanti-tray SOP 2090	Annual	0	N/A MPN/100ml		no
21/07/2016 MW2	Ammonia	konelab aquakem SOP 2057	Quarterly	0.11	0.05 mg/l	0.065-0.175	no
21/07/2016 MW2	Conductivity	Electrometry SOP 2076	Quarterly	678.00	534.25 uS/cm20°C	800-1875	no
21/07/2016 MW2	pH	Electrometry SOP 2004	Quarterly	7.70	7.58 pH units	000 = 0.0	no
21/07/2016 MW2	Temperature	Temp. Probe	Quarterly	14.00	9.80 Deg. C		no
21/07/2016 MW2	Chloride	konelab aquakem SOP 2065	Quarterly	55.13	48.86 mg/l	24-187.5	no
21/07/2016 MW2	Dissolved Oxygen	Oxygen Meter SOP 2006	Quarterly	8.28	5.54 mg/l O2		no
21/07/2016 MW2	Potassium	ICP-MS	Quarterly	8.36	3.08 mg/l		no
21/07/2016 MW2	Sodium	ICP-MS	Quarterly	27.00	24.55 mg/l	150	no
21/07/2016 MW2	Total Oxidised Nitrogen	konelab aquakem SOP 2058	Quarterly	0.80	0.64 mg/l		no
21/07/2016 MW2	Total Organic Carbon	Oxidation & Colourimetry	Quarterly	26.00	8.93 mg/l		no
21/07/2016 MW2	Phenols	Not Known	Quarterly	0.013	0.007 mg/l		no
21/07/2016 MW2	Boron	ICP-MS	Annual	0.02	N/A mg/l	0.75	no
21/07/2016 MW2	Cadmium	ICP-MS	Annual	<20.00	N/A ug/l		no
21/07/2016 MW2	Calcium	ICP-MS	Annual	88.70	N/A mg/l		no
21/07/2016 MW2	Chromium	ICP-MS	Annual	<20.00	N/A ug/I	37.5	no
21/07/2016 MW2	Copper	ICP-MS	Annual	<20.00	N/A ug/l	1500	no
21/07/2016 MW2	Iron	ICP-MS	Annual	1554.00	N/A ug/l		no
21/07/2016 MW2	Lead	ICP-MS	Annual	<20.00	N/A ug/l	18.75	no
21/07/2016 MW2	Magnesium	ICP-MS	Annual	11.10	N/A mg/l		no
21/07/2016 MW2	Zinc	ICP-MS	Annual	47.00	N/A ug/l		no
21/07/2016 MW2	Mercury	ICP-MS	Annual	<10.00	N/A mg/l	0.00075	no
21/07/2016 MW2	Manganese	ICP-MS	Annual	317.00	N/A ug/l		no
21/07/2016 MW2	Phosphate	konelab aquakem SOP 2061	Annual	0.71	N/A mg/I PO <sub>4</sub>	0.035	no
21/07/2016 MW2	Cyanide - Tot	Steam Distillation & Colourimetry	Annual	20.00	N/A ug/l	37.5	no
21/07/2016 MW2	Flouride	Ion Selective Electrode	Annual	<0.02	N/A mg/l		no
21/07/2016 MW2	Sulphate	konelab aquakem SOP 2062	Annual	89.06	N/A mg/I SO <sub>4</sub>	187.5	no
21/07/2016 MW2	Total Alkalinity	konelab aguakem SOP 2064	Annual	191.09	N/A mg/l		no
21/07/2016 MW2	Total Phosphorous	ICP-MS	Annual	0.06	N/A mg/l P		no
21/07/2016 MW2	Total Disolved Solids	Filt./Evap. & Drying @ 105°C	Annual	_	N/A mg/l		no
21/07/2016 MW2	E. Coli	Quanti-tray SOP 2090	Annual	0	N/A MPN/100ml		no
21/07/2016 MW2	Total Coliforms	Quanti-tray SOP 2090	Annual	0	N/A MPN/100ml		no
21/07/2016 MW4	Ammonia	konelab aquakem SOP 2057	Quarterly	0.17	0.08 mg/l	0.065-0.175	no
21/07/2016 MW4	Conductivity	Electrometry SOP 2076	Quarterly	209.00	82.00 uS/cm20°C	800-1875	no
21/07/2016 MW4	рН	Electrometry SOP 2004	Quarterly	6.10	5.90 pH units	550 1075	no
21/07/2016 MW4	Temperature	Temp. Probe	Quarterly	14.40	11.53 Deg. C		no
21/07/2016 MW4	Chloride	konelab aguakem SOP 2065	Quarterly	35.62	13.50 mg/l	24-187.5	no
21/07/2016 MW4	Dissolved Oxygen	Oxygen Meter SOP 2006	Quarterly	4.50	6.97 mg/l O2	_ 1 201.5	no
21/07/2016 MW4	Potassium	ICP-MS	Quarterly	2.87	1.45 mg/l		no
21/07/2016 MW4	Sodium	ICP-MS	Quarterly	30.50	12.02 mg/l	150	no
21/07/2016 MW4	Total Oxidised Nitrogen	konelab aguakem SOP 2058	Quarterly	0.59	0.77 mg/l		no
21/07/2016 MW4	Total Organic Carbon	Oxidation & Colourimetry	Quarterly	10.00	3.90 mg/l		no
21/07/2016 MW4	Phenols	Not Known	Quarterly	0.018	0.006 mg/l		no
21/07/2016 MW4	Boron	ICP-MS	Annual	0.01	N/A mg/l	0.75	no
21/07/2016 MW4	Cadmium	ICP-MS	Annual	<20.00	N/A ug/l		no
21/07/2016 MW4	Calcium	ICP-MS	Annual	6.24	N/A mg/l		no
21/07/2016 MW4	Chromium	ICP-MS	Annual	<20.00	N/A ug/I	37.5	no
21/07/2016 MW4	Copper	ICP-MS	Annual	<20.00	N/A ug/l	1500	no

Groundwater/Soil m	nonitoring template			Lic No:	W0070-01		Year	2016
21/07/2016 MW4	Iron	ICP-MS	Annual	693.00	N/A	ug/l		no
21/07/2016 MW4	Lead	ICP-MS	Annual	<20.00	N/A	ug/l	18.75	no
21/07/2016 MW4	Magnesium	ICP-MS	Annual	1.76	N/A	mg/l		no
21/07/2016 MW4	Zinc	ICP-MS	Annual	66.00	N/A	ug/l		no
21/07/2016 MW4	Mercury	ICP-MS	Annual	<10.00	N/A	mg/l	0.00075	no
21/07/2016 MW4	Manganese	ICP-MS	Annual	403.00	N/A	ug/l		no
21/07/2016 MW4	Phosphate	konelab aquakem SOP 2061	Annual	0.01	N/A	mg/I PO <sub>4</sub>	0.035	no
21/07/2016 MW4	Cyanide - Tot	Steam Distillation & Colourimetry	Annual	1.00	N/A	ug/l	37.5	no
21/07/2016 MW4	Flouride	Ion Selective Electrode	Annual	<0.02	N/A	mg/l		no
21/07/2016 MW4	Sulphate	konelab aquakem SOP 2062	Annual	11.55	N/A	mg/I SO <sub>4</sub>	187.5	no
21/07/2016 MW4	Total Alkalinity	konelab aquakem SOP 2064	Annual	8.85	N/A	mg/l		no
21/07/2016 MW4	Total Phosphorous	ICP-MS	Annual	0.03	N/A	mg/l P		no
21/07/2016 MW4	Total Disolved Solids	Filt./Evap. & Drying @ 105°C	Annual			mg/l		no
21/07/2016 MW4	E. Coli	Quanti-tray SOP 2090	Annual	210		MPN/100ml		no
21/07/2016 MW4	Total Coliforms	Quanti-tray SOP 2090	Annual	411	N/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 Groundwater Monitoring Guideline Template Report at the link provided and submit separately through ALDER as a licensee return or as otherwise instructed by the EPA.

**Groundwater monitoring template** 

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

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

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

### Table 3: Soil results

. 45.6 5. 50							
	Sample						
Date of	location			Monitoring	Maximum	Average	
sampling	reference	Parameter/ Substance	Methodology	frequency	Concentration	Concentration	unit
99							
							SELECT
							SELECT

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

# Environmental Liabilities template Lic No: W0070-01 Year 2016

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	

	<b>Environmental Management Programme/Continuous Improvement Programme</b>	e template	Lic No: W(	0070-01	Year	2016
	Highlighted cells contain dropdown menu click to view		Additional Information			
1	Do you maintain an Environmental Mangement System (EMS) for the site. If yes, please detail in					
1	additional information	Yes	Site procedures make	e up the EMS		
2	Does the EMS reference the most significant environmental aspects and associated impacts on-site	Yes				
	Does the EMS maintain an Environmental Management Programme (EMP) as required in accordance					
3	with the licence requirements	Yes				
	Do you maintain an environmental documentation/communication system to inform the public on					
4	·	Yes				

<b>Environmental Management Progr</b>	vironmental 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					

	N	oise monitor	ing summary	/ report			Lic No:	W0070-01	Year	2016								
	-	ce requirement f	-	od?				No	]									
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?  Does your site have a noise reduction plan  When was the noise reduction plan last updated?  Have there been changes relevant to site noise emissions (e.g. plant or operational changes) si noise survey?							Noise Guidance note NG4	SELECT  SELECT Enter date  SELECT										
Table N1: No	ise monitoring	summary						_										
Date of monitoring	Time period	Noise location (on site)	Noise sensitive location -NSL (if applicable)	LA <sub>eq</sub>	LA <sub>90</sub>	LA <sub>10</sub>	LA <sub>max</sub>	Tonal or Impulsive noise* (Y/N)	If tonal /impulsive noise was identified was 5dB penalty applied?	Comments (ex. main noise sources on site, & extraneous noise ex. road traffic)	Is <u>site</u> compliant with noise limits (day/evening/night)?							
								SELECT	SELECT		SELECT							
	1																	
	+																	
*Please ensure th	at a tonal analysis has	been carried out as per	r guidance note NG4.	These records mu	st be maintained	d onsite for futu	re inspection		*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 Year 2016

1 When did the site carry out the most recent energy efficiency audit? Please list the recommendations in table 3 below

N/A

Cork County Council has energy usage reduction team in operation countywide

N/A

NO countywide

Additional information

Is the site a member of any accredited programmes for reducing energy usage/water conservation such as the
SEAI programme linked to the right? If yes please list them in additional information

SEAI programme linked to the right? If yes please list them in additional information

Network (LIEN)

2

Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional information

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)	3.122	,	, 0,	production
Total Energy Generated (MWHrs)	0	0		
Total Renewable Energy Generated (MWHrs)	0	0		
Electricity Consumption (MWHrs)	3.122	2.697		
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 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 or		Water Emissions Water Consumption					
	Water extracted	Water extracted	Production +/- % compared to previous	vs overall site	Volume Discharged back to	Volume used i.e not discharged to environment e.g.	
Water use	Previous year m3/yr.	Current year m3/yr.	reporting year**	production*	environment(m³yr):	released as steam m3/yr	Unaccounted for Water:
Groundwater							
Surface water							
Public supply							
Recycled water							
Total							

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

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

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

Resource	e Usage/Energy efficiency summary				Lic No:	W0070-01		Year	2016
	Table R4: Energy Audit finding recommendations								
	Date of audit		Description of Measures proposed		Predicted energy savings %	Implementation date	Responsibility		Status and comments
				SELECT					
				SELECT					
				SELECT					

Table R5: Power Generation: Where power is generated onsite (e.g. power generation facilities/food and drink industry)please complete the following information								
	Unit ID	Unit ID	Unit ID	Unit ID	Station Total			
Technology								
Primary Fuel								
Thermal Efficiency								
Unit Date of Commission								
Total Starts for year								
Total Running Time								
Total Electricity Generated (GWH)								
House Load (GWH)								
KWH per Litre of Process Water								
KWH per Litre of Total Water used on Site								

Complaints and Incidents summary template		Lic No:	W0070-01	Year	2016	
Complaints						
		Additional inform	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	No					

Table	1 Complaints summary						
D-4-	Cohorani	Other type (please specify)	Brief description of complaint (Free txt <20 words)	Corrective action< 20 words	Resolution status	Posalution data	Further information
Date	Category SELECT	Other type (please specify)	worus)	worus	SELECT	Resolution date	IIIIOIIIIatioii
							1
	SELECT				SELECT		
	SELECT				SELECT		
	SELECT				SELECT		
	SELECT				SELECT		
open at start of reporting year Total new complaints received during reporting year Total complaints	(	<u> </u>					
closed during reporting year	(						
Balance of complaints end of reporting year							

	Incidents			
	incidents			Additional information
Have any incidents occurred on site in the current repo	No	Additional information		
*For information on how to report and what	What is an incident			

Table 2 Incidents sur	mmary													
			Incident			Other	Activity in				Preventative			
			category*please refer to			cause(please	progress at			Corrective action<20	action <20		Resolution	Likelihood of
Date of occurrence	Incident nature	Location of occurrence	guidance	Receptor	Cause of incident	specify)	time of incident	Communication	Occurrence	words	words	Resolution status	date	reoccurence
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
Total a salas of														

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

VASTE SUMMARY					Lic No:	W0070-01		Year	2016			Ī
	N SITE WASTE TREATMENT AND	WASTE TRANSFERS TAR.	TO BE COMPLETED			PRTR facility logor	1		st click to see options			l
									·			
SECTION B- WASTE	ACCEPTED ONTO SITE-TO BE CO	MPLETED BY ALL IPPC AN	ID WASTE FACILITIES	S			Additional Informati	on				
ooundaries is to be captu f yes please enter details	ed onto your site for recovery or disposal or red through PRTR reporting) in table 1 below ected consignments of waste in the curre					No No	Additional miormati					
Was wa	ste accepted onto your site that was gene	erated outside the Republic of Ire	eland? If yes please state t	he quantity in tonnes in a	additional information	No						
Table 1 Details o Licenced annual tonnage limit for your site (total tonnes/annum)	f waste accepted onto your  EWC code	Source of waste accepted		Quantity of waste accepted in current reporting year (tonnes)	Quantity of waste accepted in previous reporting year (tonnes)	Reduction/ Increase over previous year +/ -	Reason for reduction/ increase from previous reporting year	Packaging Content (%)-	Disposal/Recovery or treatment operation carried out at your site and the description of this operation	Quantity of waste remaining on site at the end	Comments -	
	European Waste Catalogue EWC codes		description - which applies to relevant EWC code European Waste Catalogue EWC codes				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			of reporting year (tonnes)		
Is all waste processing inf Is all waste storage infras Does your facility have re Do you have an odour ma	DMPLETED BY ALL WASTE FACIL  rastructure as required by your licence and a  tructure as required by your licence and a  levant nuisance controls in place?  nagement system in place for your facilit- register on site?	nd approved by the Agency in pla approved by the Agency in place?	ce? If no please list waste	processing infrastructure	e required onsite	SELECT SELECT SELECT SELECT SELECT SELECT SELECT						
Is all waste processing info Is all waste storage infras Does your facility have re Do you have an odour ma Do you maintain a sludge SECTION D-TO BE C	rastructure as required by your licence and tructure as required by your licence and a levant nuisance controls in place? magement system in place for your facility register on site?	nd approved by the Agency in place?  approved by the Agency in place?	ce? If no please list waste	processing infrastructure	e required onsite	SELECT SELECT SELECT						
Is all waste processing infras Is all waste storage infras Does your facility have re Do you have an odour ma Do you maintain a sludge SECTION D-TO BE C Table 2 Waste type Waste types permitted	rastructure as required by your licence and a tructure as required by your licence and a levant nuisance controls in place? Inagement system in place for your facility register on site?  OMPLETED BY LANDFILL SITES O and tonnage-landfill only  Authorised/licenced annual intake for	approved by the Agency in place?  approved by the Agency in place?  y? If no why?  DNLY  Actual intake for disposal in	ce? If no please list waste sto  If no please list waste sto  Remaining licensed capacity at end of	processing infrastructure	e required onsite	SELECT SELECT SELECT						
Is all waste processing info Is all waste storage infras Does your facility have re Do you have an odour ma Do you maintain a sludge SECTION D-TO BE C Table 2 Waste type	rastructure as required by your licence and tructure as required by your licence and a levant nuisance controls in place? Inagement system in place for your facilities register on site?  OMPLETED BY LANDFILL SITES Of and tonnage-landfill only	nd approved by the Agency in place? approved by the Agency in place? sy? If no why?	ce? If no please list waste  If no please list waste sto  Remaining licensed	processing infrastructure	e required onsite	SELECT SELECT SELECT						
Is all waste processing info Is all waste storage infras Does your facility have re Do you have an odour ma Do you maintain a sludge SECTION D-TO BE C Table 2 Waste type Waste types permitted for disposal N/A - Landfill Closed	rastructure as required by your licence and a tructure as required by your licence and a levant nuisance controls in place? Inagement system in place for your facility register on site?  OMPLETED BY LANDFILL SITES O and tonnage-landfill only  Authorised/licenced annual intake for	approved by the Agency in place?  approved by the Agency in place?  y? If no why?  DNLY  Actual intake for disposal in	ce? If no please list waste sto  If no please list waste sto  Remaining licensed capacity at end of	processing infrastructure	e required onsite	SELECT SELECT SELECT						
Is all waste processing info Is all waste storage infras Does your facility have re Do you have an odour ma Do you maintain a sludge SECTION D-TO BE C Table 2 Waste type Waste types permitted for disposal N/A - Landfill Closed	rastructure as required by your licence and a tructure as required by your licence and a levant nuisance controls in place? Interest the system in place for your facilities register on site?  OMPLETED BY LANDFILL SITES Of and tonnage-landfill only  Authorised/licenced annual intake for disposal (tpa)	approved by the Agency in place?  approved by the Agency in place?  y? If no why?  DNLY  Actual intake for disposal in	ce? If no please list waste sto  If no please list waste sto  Remaining licensed capacity at end of	processing infrastructure	e required onsite	SELECT SELECT SELECT	Licence permits asbestos	Is there a separate cell for asbestos?	Accepted asbestos in reporting	Total disposal area occupied by waste	Lined disposal area occupied by waste	Unlined area

N/A - Landfill Closed

WASTE SUMMARY		Lic No:	W0070-01	Year	2016
Table 4 Environmental monitoring-landfill only	andfill Manual Monitoring Standards	<u> </u>			·

Table 4 Environmen	itai monitoring-iandfili only	Landfill Manual-Monitoring Standards							
Was meterological							Has the statement		
monitoring in compliance			Was SW monitored in			Was topography	under S53(A)(5) of		
with Landfill Directive		Was Landfill Gas monitored in	compliance with LD			of the site	WMA been		
(LD) standard in	Was leachate monitored in compliance	compliance with LD standard	standard in reporting	Have GW trigger levels	Were emission limit values agreed with	surveyed in	submitted in		
reporting year +	with LD standard in reporting year	in reporting year	year	been established	the Agency (ELVs)	reporting year	reporting year	Comments	
N/A	Voc	Vos	Voc	Voc	Voc	No	No		

N/A | Yes | Yes | Yes | .+ please refer to Landfill Manual linked above for relevant Landfill Directive monitoring standards | Table 5 Capping-Landfill only |

Table 3 Capping-Lai	ible 5 Capping-Landin Only						
				Area with waste that			
Area uncapped*	Area with temporary cap			should be permanently			
and now them	OPT POTENTIAL	Area with final cap to LD		capped to date under			
SELECT UNIT	SELECT UNIT	Standard m2 ha, a	Area capped other	licence	What materials are used in the cap	Comments	
N/A - Landfill Closed							

\*please note this includes daily cover area

Table 6 Leachate-Landfill only

9 Is leachate from your site treated in a Waste Water Treatment Plant?

10 Is leachate released to surface water? If yes please complete leachate mass load information below

I/A		
lo		

						Specify type of	
Volume of leachate in		Leachate (COD) mass load	Leachate (NH4) mass	Leachate (Chloride)		leachate	
reporting year(m3)	Leachate (BOD) mass load (kg/annum)	(kg/annum)	load (kg/annum)	mass load kg/annum	Leachate treatment on-site	treatment	Comments
C					No		

Table 7 Landfill Gas-Landfill only

Gas Captured&Treated by LFG System m3	Power generated (MW / KWh)	Used on-site or to national grid	Was surface emissions monitoring performed during the reporting year?	Comments
CH <sub>4</sub> - 6251	0	0	No	



# **Guidance to completing the PRTR workbook**

# **PRTR Returns Workbook**

/ersion 1 1 19

# REFERENCE YEAR 2016

# 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

Chacobo of Floating							
No.	class_name						
<del>-</del>	Refer to PRTR class activities below						

Address 1	
Address 2	Rosscarbery
Address 3	
Address 4	
	Cork
Country	
Coordinates of Location	
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	
User Feedback/Comments	
Web Address	
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)

0.00212.1101.2002.1101.0 (0 110.0 0 200							
Is it applicable?	No						
Have you been granted an exemption?							
If applicable which activity class applies (as per							
Schedule 2 of the regulations)?							
Is the reduction scheme compliance route being							
used?							

# 4. WASTE IMPORTED/ACCEPTED ONTO SITE

Guidance on waste imported/accepted onto site

Do you import/accept waste onto your site	for on-
site treatment (either recovery or dis	sposal
activ	ities)?

### SECTION A: SECTOR SPECIFIC PRTR POLLUTANTS

	Please enter all quantities in this section in KGs							
POLLUTANT			METHO	DD	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
)1	Methane (CH4)	С	OTH	LandGEM Modelling	0.0	179823.89	0.0	179823.89

<sup>\*</sup> 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			METH	HOD	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

<sup>\*</sup> 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			METH	IOD	QUANTITY					
			Me	thod 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		

<sup>\*</sup> 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 enthane (CH4) emission to the environment under (Total) KGyr for Section A: Sector specific PRTR pollutants above. Please complete the table below:

Landfill: Benduff Landfill Site

		Metl			
T (Total) kg/Year	M/C/E	Method Code	Designation or Description	Facility Total Capacity m3 per hour	
184097.89	С	отн	Landgem	N/A	
4274.0	С	OTH	Landfill Gas Survey	500.0	(Total Flaring Capacity)
0.0				0.0	(Total Utilising Capacity)
179823.89	С	OTH	LandGEM Modelling	N/A	
	184097.89 4274.0 0.0	184097.89 C	T (Total) kg/Year M/C/E Method Code  184097.89 C OTH 4274.0 C OTH 0.0	184097.89 C OTH Landgem 4274.0 C OTH Landfill Gas Survey 0.0	T (Total) kg/Year  M/C/E  Method Code  Description  Facility Total Capacity m3 per hour  184097.89 C OTH Landgem N/A  4274.0 C OTH Landfill Gas Survey 500.0  0.0  0.0  0.0