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.

2015	
W0070-01	
Benduff Landfill Site	
Benduff, Rosscarbery, Co. Cork	
3821	
Installation for the disposal of non haza	ardous
(52E, 53N)	

### Description of Activities on Site during 2015:

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 2015 was the extraction of gas from the closed landfill (extracted gas is flared on-site). **Exceedances of Licence Limits during 2015**:

None.

### **Overview of Licence Compliance during 2015:**

There was 1 non-compliance issued against the licence in 2015 which related to the late submission of the Report on Compliance with the EO (Groundwater) Regulations.

### **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: 03/03/2016

	AIR-summary template	Lic No:	W0070-01	Year	2015
	Answer all questions and complete all tables where relevant		Additional information		
1	Does your site have licensed air emissions? If yes please complete table A1 and A2 below for the current reporting year and answer further questions. If you do not have licenced emissions and do not complete a solvent management plan (table A4 and A5) you <u>do not</u> need to complete the tables	t Yes	Current flare installation is a pre-aerated open f 500 cubic meter per hour capacity. Emissions mo not possible from such an installation.	lare of 50- initoring is	

Periodic/Non-Continuous Monitoring
------------------------------------

2	Are there any results in breach of licence requirements? If yes pleas TableA1 below	N/A		
3	B Was all monitoring carried out in accordance with EPA guidance <u>m</u> note AG2 and using the basic air monitoring checklist? c	Basic air_ monitoring_ checklist AGN2	N/A	

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

										Comments -
										reason for
										change in %
										mass load
										from
			ELV in licence or							previous
Emission		Frequency of	any revision			Unit of	Compliant with		Annual mass	year if
reference no:	Parameter/ Substance	Monitoring	therof	Licence Compliance criteria	Measured value	measurement	licence limit	Method of analysis	load (kg)	applicable
	SELECT			SELECT		SELECT	SELECT	SELECT		
	SELECT					SELECT				
	SELECT			SELECT		SELECT	SELECT	SELECT		
	CELECT.			CELECT.		CELECT.	CELECT	CELECT.		
	SELECI			SELECI		SELECT	SELECT	SELECI		
	SELECT			SELECT		SELECT	SELECT	SELECT		

No

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

### **Continuous Monitoring**

4

Does your site carry out continuous air emissions monitoring?

If yes please review your continuous monitoring data and report the required fields below in Table A2 and compare it to its relevant Emission Limit Value (ELV)

<sup>5</sup> Did continuous monitoring equipment experience downtime? If yes please record downtime in table A2 below

SELECT	

	AIR-summary template	Lic No:	W0070-01	Year	2015
6					
0	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			

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

Table A2: Summary of average emissions -continuous monitoring

Emission	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

\* 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 e	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		

AIR-summar	y template				Lic No:	W0070-01		Year	2015	
Reporting year	Total solvent input on site (kg)	Total VOC emissions to Air from entire site (direct and fugitive)	Total VOC emissions as %of solvent input	Total Emission Limit Value (ELV) in licence or any revision therof	Compliance					
					SELECT	_				
					SELECT					
Table As	: 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)		
							Total			

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

### Lic No: W0070-01 Year

2015

#### Additional information

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 <u>only</u> 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 on or near your site? If yes please complete table W2 below summarising <u>only any evidence of contamination noted</u> <u>during visual inspections</u>

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

No

#### Table W1 Storm 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	activities	, and a subscreen	Electriced Fundameter	date	or any revision	criteria	incusared value	measurement	licence	connents
	activities				thereof*	criteria				
SW1	upstream		pH	15/01/2015	N/A	N/A	6.80	pH units	yes	
SW1	upstream		Conductivity	15/01/2015	N/A	N/A	144.00	µS/cm @20oC	yes	
SW1	upstream		Dissolved Oxygen	15/01/2015	N/A	N/A	8.50	mg/L	yes	
SW1	upstream		Ammonia (as N)	15/01/2015	N/A	N/A	0.02	mg/L	yes	
SW1	upstream		BOD	15/01/2015	N/A	N/A	2.00	mg/L	yes	
SW1	upstream		COD	15/01/2015	N/A	N/A	14.00	mg/L	yes	
SW1	upstream	Chlorides (as Cl)		15/01/2015	N/A	N/A	25.35	mg/L	yes	
SW1	upstream		Suspended Solids	15/01/2015	N/A	N/A	9.00	mg/L	yes	
SW1	upstream		Boron	09/04/2015	N/A	N/A	0.03	mg/L	yes	
SW1	upstream		Calcium	09/04/2015	N/A	N/A	10.50	mg/L	yes	
SW1	upstream	Cadmium and compounds (as Cd)		09/04/2015	N/A	N/A	<20.00	μg/L	yes	
SW1	upstream	Chromium and compounds (as Cr)		09/04/2015	N/A	N/A	<20.00	μg/L	yes	
SW1	upstream	Copper and compounds (as Cu)		09/04/2015	N/A	N/A	<20.00	μg/L	yes	
SW1	upstream		Iron	09/04/2015	N/A	N/A	41.60	μg/L	yes	
SW1	upstream	Mercury and compounds (as Hg)		09/04/2015	N/A	N/A	<10.00	mg/L	yes	
SW1	upstream		Potassium	09/04/2015	N/A	N/A	<2.00	mg/L	yes	
SW1	upstream		Magnesium	09/04/2015	N/A	N/A	3.11	mg/L	yes	
SW1	upstream		Manganese (as Mn)	09/04/2015	N/A	N/A	<20.00	μg/L	yes	
SW1	upstream		Sodium	09/04/2015	N/A	N/A	13.50	mg/L	yes	
SW1	upstream	Nickel and compounds (as Ni)		09/04/2015	N/A	N/A	<20.00	μg/L	yes	
SW1	upstream	Total phosphorus		09/04/2015	N/A	N/A	0.02	mg/L	yes	
SW1	upstream	Lead and compounds (as Pb)		09/04/2015	N/A	N/A	<20.00	μg/L	yes	
SW1	upstream		Sulphate	09/04/2015	N/A	N/A	6.30	mg/L SO <sub>4</sub>	ves	
SW1	unstream		Total Oxidised Nitrogen (TON)	09/04/2015	Ν/Δ	ν/Δ	1.65	mg/LN	Ves	
SW1	unstream	Zinc and compounds (as Zn)	rotar oxidised mitrogen (roti)	09/04/2015	N/A	Ν/Δ	73.60	110/211	ves	
SW1	unstream	Ente una compoundo (do En)	Alkalinity	09/04/2015	N/A	Ν/Δ	15.67	mg/l	ves	
51/1	unstream		Ortho-phosphate (as PO4)	09/04/2015	N/A	N/A	0.25	mg/LPO.	ves	
5001	upstream		ortho-phosphate (as 1 04)	05/04/2015	N/A	N/A	0.23	111g/ L 1 04	yes	
5004	downstream		pH Conductivity	15/01/2015	N/A	N/A	79	pH units	yes	
5004	downstream		Disselved Owners	15/01/2015	N/A	N/A	354.00	μs/cm @2000	yes	
SW4	downstream		Dissolved Oxygen	15/01/2015	N/A	N/A	8.80	mg/L	yes	
5004	downstream		Ammonia (as N)	15/01/2015	N/A	N/A	0.04	mg/L	yes	
5004	downstream		BOD	15/01/2015	N/A	N/A	2.00	mg/L	yes	
SW4	downstream		COD	15/01/2015	N/A	N/A	16.00	mg/L	yes	
SW4	downstream	Chiorides (as CI)		15/01/2015	N/A	N/A	39.52	mg/L	yes	
SW4	downstream		Suspended Solids	15/01/2015	N/A	N/A	6.00	mg/L	yes	
SW4	downstream		Boron	09/04/2015	N/A	N/A	0.04	mg/L	yes	
SW4	downstream		Calcium	09/04/2015	N/A	N/A	53.80	mg/L	yes	
SW4	downstream	Cadmium and compounds (as Cd)		09/04/2015	N/A	N/A	<20.00	µg/L	yes	
SW4	downstream	Chromium and compounds (as Cr)		09/04/2015	N/A	N/A	<20.00	µg/L	yes	
SW4	downstream	Copper and compounds (as Cu)		09/04/2015	N/A	N/A	<20.00	µg/L	yes	
SW4	downstream		Iron	09/04/2015	N/A	N/A	<20.00	μg/L	yes	<b> </b>
SW4	downstream	Mercury and compounds (as Hg)		09/04/2015	N/A	N/A	<10.00	mg/L	yes	
SW4	downstream		Potassium	09/04/2015	N/A	N/A	5.26	mg/L	yes	
SW4	downstream		Magnesium	09/04/2015	N/A	N/A	7.85	mg/L	yes	
SW4	downstream		Manganese (as Mn)	09/04/2015	N/A	N/A	21.50	μg/L	yes	
SW4	downstream		Sodium	09/04/2015	N/A	N/A	17.20	mg/L	yes	
SW4	downstream	Nickel and compounds (as Ni)		09/04/2015	N/A	N/A	<20.00	μg/L	yes	
SW4	downstream	Total phosphorus		09/04/2015	N/A	N/A	0.05	mg/L	yes	
SW4	downstream	Lead and compounds (as Pb)		09/04/2015	N/A	N/A	<20.00	μg/L	yes	
SW4	downstream		Sulphate	09/04/2015	N/A	N/A	13.97	mg/L SO <sub>4</sub>	yes	L
SW4	downstream		Total Oxidised Nitrogen (TON)	09/04/2015	N/A	N/A	4.59	mg/L N	yes	I
SW4	downstream	Zinc and compounds (as Zn)		09/04/2015	N/A	N/A	28.70	μg/L	yes	
SW4	downstream		Alkalinity	09/04/2015	N/A	N/A	90.42	mg/L	yes	
SW4	downstream		Ortho-phosphate (as PO4)	09/04/2015	N/A	N/A	0.02	mg/L PO <sub>4</sub>	yes	
SW5	downstream		pH	15/01/2015	N/A	N/A	7.30	pH units	yes	
SW5	downstream		Conductivity	15/01/2015	N/A	N/A	139.00	uS/cm @20oC	ves	
SW5	downstream		Dissolved Oxygen	15/01/2015	N/A	N/A	9.15	mg/L	yes	

AER Monito	ring returns s	ummary template-WATER/WAS	TEWATER(SEWER)			Lic No:	W0070-01		Year	2015	
SW5	downstream		Ammonia (as N)	15/01/2015	N/A	N/A	0.01	mg/L	yes		
SW5	downstream		BOD	15/01/2015	N/A	N/A	<1.00	mg/L	yes		
SW5	downstream		COD	15/01/2015	N/A	N/A	<1.00	mg/L	yes		
SW5	downstream	Chlorides (as Cl)		15/01/2015	N/A	N/A	26.16	mg/L	yes		
SW5	downstream		Suspended Solids	15/01/2015	N/A	N/A	8.00	mg/L	yes		
SW5	downstream		Boron	09/04/2015	N/A	N/A	0.02	mg/L	yes		
SW5	downstream		Calcium	09/04/2015	N/A	N/A	9.76	mg/L	yes		
SW5	downstream	Cadmium and compounds (as Cd)		09/04/2015	N/A	N/A	<20.00	μg/L	yes		
SW5	downstream	Chromium and compounds (as Cr)		09/04/2015	N/A	N/A	<20.00	μg/L	yes		
SW5	downstream	Copper and compounds (as Cu)		09/04/2015	N/A	N/A	<20.00	μg/L	yes		
SW5	downstream		Iron	09/04/2015	N/A	N/A	20.40	μg/L	yes		
SW5	downstream	Mercury and compounds (as Hg)		09/04/2015	N/A	N/A	<10.00	mg/L	yes		
SW5	downstream		Potassium	09/04/2015	N/A	N/A	<2.00	mg/L	yes		
SW5	downstream		Magnesium	09/04/2015	N/A	N/A	3.11	mg/L	yes		
SW5	downstream		Manganese (as Mn)	09/04/2015	N/A	N/A	<20.00	μg/L	yes		
SW5	downstream		Sodium	09/04/2015	N/A	N/A	13.60	mg/L	yes		
SW5	downstream	Nickel and compounds (as Ni)		09/04/2015	N/A	N/A	<20.00	μg/L	yes		
SW5	downstream	Total phosphorus		09/04/2015	N/A	N/A	0.03	mg/L	yes		
SW5	downstream	Lead and compounds (as Pb)		09/04/2015	N/A	N/A	<20.00	μg/L	yes		
SW5	downstream		Sulphate	09/04/2015	N/A	N/A	6.40	mg/L SO <sub>4</sub>	yes		
SW5	downstream		Total Oxidised Nitrogen (TON)	09/04/2015	N/A	N/A	1.06	mg/L N	yes		
SW5	downstream	Zinc and compounds (as Zn)		09/04/2015	N/A	N/A	86.30	μg/L	yes		
SW5	downstream		Alkalinity	09/04/2015	N/A	N/A	17.97	mg/L	yes		
SW5	downstream		Ortho-phosphate (as PO4)	09/04/2015	N/A	N/A	0.01	mg/L PO <sub>4</sub>	yes		

7

\*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		
c	thecklists for Quality of Aqueous Monitoring Data Reported to the EPA? If		
n	o 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	Type of sample	Frequency of monitoring	Averaging period	ELV or trigger values in licence or any revision therof <sup>Note 2</sup>	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Method of analysis	Procedural reference source	Procedural reference standard number	Annual mass load (kg)	Comments
	SELECT	SELECT	discrete		SELECT		SELECT		SELECT	SELECT	SELECT	SELECT			

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

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

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

	Additional Information
10	

If yes please summarise your continuous monitoring data below in Table W4 and compare it to its relevant Emission Limit Value (ELV)

6 Did continuous monitoring equipment experience downtime? If yes please record downtime in table W4 below	SELECT	
7 Do you have a proactive service contract for each piece of continuous monitoring equipment on site?	SELECT	
8 Did abatement system bypass occur during the reporting year? If yes please complete table W5 below	SELECT	

Table W4: Summary of average emissions -continuous monitoring

AER Monito	ring returns su	ummary template-WATER/WAST	EWATER(SEWER)			Lic No:	W0070-01		Year	2015	
1	1	· · · ·		1		1	1	1			
								% 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	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	2015	
						· · · · ·
Bund testing dropdown menu click to see options			Additional information	_		
Are you required by your licence to undertake integrity testing on bunds and containment structures ? if yes please fill out table B1	below listing all new bunds					
and containment structures on site, in addition to all bunds which failed the integrity test-all bunding structures which failed inclu	ding mobile bunds must be					
1 listed in the table below, please include all bunds outside the licenced testing period(mobile bunds and chemstore included)		Vec				
2 Please provide integrity testing frequency period		3 years		-		
Does the site maintain a register of bunds, underground pipelines (including stormwater and foul). Tanks, sumps and containers? (c	ontainers 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 within the required test schedule?		1				
6 How many mobile bunds are on site?		0				
7 Are the mobile bunds included in the bund test schedule?		N/A				
8 How many of these mobile bunds have been tested within the required test schedule?		N/A				
9 How many sumps on site are included in the integrity test schedule?		N/A				
10 How many of these sumps are integrity tested within the test schedule?		N/A		1		
Please list any sump integrity failures in table B1				-		
11 Do all sumps and chambers have high level liquid alarms?		Yes		_		
12 If yes to Q11 are these fails are systems included in a maintenance and testing programme?		Yes		4		
13 Is the Fire Water Retention Pond included in your integrity test programme?		N/A		1		
Table B1: Summary datails of bund /containment structure integrity test						

9

Tal	ble B1: Summary details of	f bund /containment structure int	egrity test											
Bund/Containment									Integrity reports maintained on		Integrity test failure		Scheduled date	Results of retest(if in current
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	explanation <50 words	Corrective action taken	for retest	reporting yea
	SELECT					SELECT			SELECT	SELECT		SELECT		
	SELECT					SELECT			SELECT	SELECT		SELECT		
* Capacity required should cor	nply with 25% or 110% containment	rule asdetailed in your licence					Commentary		•					
Has integrity testing b	peen carried out in accorda	ance with licence requirements an	d are all structures tested					I						
15 in line with BS8007/E	PA Guidance?			bunding and storage guidel	lines	SELECT		1						
16 Are channels/transfer	r systems to remote contai	inment systems tested?				SELECT								

SELECT

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

ineline/undergrou	nd 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 pipeline/underground structures integrity test 

Structure ID	Type system	Material of construction:	Does this structure have Secondary containment?	Type of secondary containment	Type integrity testing	Integrity reports maintained on site?	Results of test	Integrity test failure explanation <50 words	Corrective action taken	Scheduled date for retest	Results of retest(if in curren reporting year)
	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT				SELECT

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

Groundwater	/Soil monitorir	ig template
-------------	-----------------	-------------

	Com	ments
<sup>1</sup> 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.	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
7 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.
<sup>10</sup> 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	for pCOCs ammonia, chloride and manganese.
12 Is there evidence that contamination is migrating offsite?	yes	

Lic No:

W0070-01

Year

2015

### 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
09/04/2015	MW3	Ammonia	konelab aquakem SOP 2057	Quarterly	0.36	0.22	mg/l	0.065-0.175		no
09/04/2015	MW3	Conductivity	Electrometry SOP 2076	Quarterly	210.00	197.00	uS/cm20°C	800-1875		no
09/04/2015	MW3	рН	Electrometry SOP 2004	Quarterly	6.50	6.25	pH units			no
09/04/2015	MW3	Temperature	Temp. Probe	Quarterly	13.90	11.13	Deg. C			no
09/04/2015	MW3	Chloride	konelab aquakem SOP 2065	Quarterly	25.11	23.32	mg/l	24-187.5		no
09/04/2015	MW3	Dissolved Oxygen	Oxygen Meter SOP 2006	Quarterly	6.10	5.39	mg/I O2			no
09/04/2015	MW3	Potassium	ICP-MS	Quarterly	4.66	3.31	mg/l			no
09/04/2015	MW3	Sodium	ICP-MS	Quarterly	20.30	18.58	mg/l	150		no
09/04/2015	MW3	Total Oxidised Nitrogen	konelab aquakem SOP 2058	Quarterly	18.59	5.19	mg/l			no
09/04/2015	MW3	Total Organic Carbon	Oxidation & Colourimetry	Quarterly	61.00	17.88	mg/l			no
09/04/2015	MW3	Phenols	Not Known	Quarterly	0.003	0.002	mg/l			no
09/04/2015	MW3	Boron	ICP-MS	Annual	0.03	N/A	mg/l	0.75		no
09/04/2015	MW3	Cadmium	ICP-MS	Annual	25.00	N/A	ug/l			no
09/04/2015	MW3	Calcium	ICP-MS	Annual	15.10	N/A	mg/l			no
09/04/2015	MW3	Chromium	ICP-MS	Annual	<20.00	N/A	ug/l	37.5		no

Groundwater/Soi	monitoring template			Lic No:	W0070-01		Year	2015	
09/04/2015 MW3	Copper	ICP-MS	Annual	<20.00	N/A	ug/l	1500	1	no
09/04/2015 MW3	Iron	ICP-MS	Annual	625.00	N/A	ug/l		1	no
09/04/2015 MW3	Lead	ICP-MS	Annual	<20.00	N/A	ug/l	18.75	1	no
09/04/2015 MW3	Magnesium	ICP-MS	Annual	4.18	N/A	mg/l		1	no
09/04/2015 MW3	Zinc	ICP-MS	Annual	1976.00	N/A	ug/l		1	no
09/04/2015 MW3	Mercury	ICP-MS	Annual	<10.00	N/A	mg/l	0.00075	1	no
09/04/2015 MW3	Manganese	ICP-MS	Annual	3820.00	N/A	ug/l		1	no
09/04/2015 MW3	Phosphate	konelab aquakem SOP 2061	Annual	0.01	N/A	mg/l PO <sub>4</sub>	0.035		no
09/04/2015 MW3	Cyanide - Tot	Steam Distillation & Colourimetry	Annual	3.00	N/A	ug/l	37.5	1	no
09/04/2015 MW3	Flouride	Ion Selective Electrode	Annual	0.07	N/A	mg/l		1	no
09/04/2015 MW3	Sulphate	konelab aquakem SOP 2062	Annual	11.28	N/A	mg/l SO <sub>4</sub>	187.5	1	no
09/04/2015 MW3	Total Alkalinity	konelab aquakem SOP 2064	Annual	48.34	N/A	mg/l		1	no
09/04/2015 MW3	Total Phosphorous	ICP-MS	Annual	0.04	N/A	mg/l P		1	no
09/04/2015 MW3	Total Disolved Solids	Filt./Evap. & Drying @ 105°C	Annual	103.00	N/A	mg/l		1	no
09/04/2015 MW3	E. Coli	Quanti-tray SOP 2090	Annual	<1	N/A	MPN/100ml		1	no
09/04/2015 MW3	Total Coliforms	Quanti-tray SOP 2090	Annual	488.00	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

										Upward trend in yearly
	Sample									average 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
09/04/2015	MW1	Ammonia	konelab aquakem SOP 2057	Quarterly	4.05	3.29	mg/l	0.065-0.175		no
09/04/2015	MW1	Conductivity	Electrometry SOP 2076	Quarterly	904.00	645.50	uS/cm20°C	800-1875		no
09/04/2015	MW1	рН	Electrometry SOP 2004	Quarterly	6.80	6.58	pH units			no
09/04/2015	MW1	Temperature	Temp. Probe	Quarterly	13.10	11.33	Deg. C			no
09/04/2015	MW1	Chloride	konelab aquakem SOP 2065	Quarterly	45.09	34.90	mg/l	24-187.5		no
09/04/2015	MW1	Dissolved Oxygen	Oxygen Meter SOP 2006	Quarterly	14.10	5.94	mg/l O2			no
09/04/2015	MW1	Potassium	ICP-MS	Quarterly	15.10	10.50	mg/l			no
09/04/2015	MW1	Sodium	ICP-MS	Quarterly	31.00	25.20	mg/l	150		no
09/04/2015	MW1	Total Oxidised Nitrogen	konelab aquakem SOP 2058	Quarterly	3.60	1.84	mg/l			no
09/04/2015	MW1	Total Organic Carbon	Oxidation & Colourimetry	Quarterly	8.20	4.15	mg/l			no
09/04/2015	MW1	Phenols	Not Known	Quarterly	0.003	0.002	mg/l			no
09/04/2015	MW1	Boron	ICP-MS	Annual	0.04	N/A	mg/l	0.75		no
09/04/2015	MW1	Cadmium	ICP-MS	Annual	<20.00	N/A	ug/l			no
09/04/2015	MW1	Calcium	ICP-MS	Annual	61.60	N/A	mg/l			no
09/04/2015	MW1	Chromium	ICP-MS	Annual	<20.00	N/A	ug/l	37.5		no
09/04/2015	MW1	Copper	ICP-MS	Annual	<20.00	N/A	ug/l	1500		no
09/04/2015	MW1	Iron	ICP-MS	Annual	21.20	N/A	ug/l			no
09/04/2015	MW1	Lead	ICP-MS	Annual	<20.00	N/A	ug/l	18.75		no
09/04/2015	MW1	Magnesium	ICP-MS	Annual	16.50	N/A	mg/l			no
09/04/2015	MW1	Zinc	ICP-MS	Annual	30.40	N/A	ug/l			no
09/04/2015	MW1	Mercury	ICP-MS	Annual	<10.00	N/A	mg/l	0.00075		no
09/04/2015	MW1	Manganese	ICP-MS	Annual	1696.00	N/A	ug/l			no
09/04/2015	MW1	Phosphate	konelab aquakem SOP 2061	Annual	0.01	N/A	mg/l PO <sub>4</sub>	0.035		no
09/04/2015	MW1	Cyanide - Tot	Steam Distillation & Colourimetry	Annual	2.00	N/A	ug/l	37.5		no
09/04/2015	MW1	Flouride	Ion Selective Electrode	Annual	0.17	N/A	mg/l			no
09/04/2015	MW1	Sulphate	konelab aquakem SOP 2062	Annual	98.72	N/A	mg/I SO <sub>4</sub>	187.5		no
09/04/2015	MW1	Total Alkalinity	konelab aquakem SOP 2064	Annual	113.80	N/A	mg/l			no

Froundwater/So	il monitoring template			Lic No:	W0070-01	Year	2015	
09/04/2015 MW1	Total Phosphorous	ICP-MS	Annual	0.03	N/A mg/l P		no	
09/04/2015 MW1	Total Disolved Solids	Filt./Evap. & Drying @ 105°C	Annual	260.00	N/A mg/l		no	
09/04/2015 MW1	E. Coli	Quanti-tray SOP 2090	Annual	<1	N/A MPN/100ml		no	
09/04/2015 MW1	Total Coliforms	Quanti-tray SOP 2090	Annual	1.00	N/A MPN/100ml		no	
09/04/2015 MW2	Ammonia	konelab aquakem SOP 2057	Quarterly	0.11	0.06 mg/l	0.065-0.175	no	
09/04/2015 MW2	Conductivity	Electrometry SOP 2076	Quarterly	721.00	595.50 uS/cm20°C	800-1875	no	
09/04/2015 MW2	рН	Electrometry SOP 2004	Quarterly	7.60	7.53 pH units		no	
09/04/2015 MW2	Temperature	Temp. Probe	Quarterly	13.00	10.98 Deg. C		no	
09/04/2015 MW2	Chloride	konelab aguakem SOP 2065	Quarterly	55.39	53.24 mg/l	24-187.5	no	
09/04/2015 MW2	Dissolved Oxygen	Oxygen Meter SOP 2006	Quarterly	10.10	5.88 mg/l O2		no	
09/04/2015 MW2	Potassium	ICP-MS	Quarterly	3.45	2.35 mg/l		no	
09/04/2015 MW2	Sodium	ICP-MS	Quarterly	36.70	30.20 mg/l	150	no	
09/04/2015 MW2	Total Oxidised Nitrogen	konelab aquakem SOP 2058	Quarterly	1.75	0.96 mg/l		no	
09/04/2015 MW2	Total Organic Carbon	Oxidation & Colourimetry	Quarterly	4.90	2.80 mg/l		no	
09/04/2015 MW2	Phenols	Not Known	Quarterly	0.010	0.005 mg/l		no	
09/04/2015 MW2	Boron	ICP-MS	Annual	0.03	N/A mg/l	0.75	no	
09/04/2015 MW2	Cadmium	ICP-MS	Annual	<20.00	N/A ug/l		no	
09/04/2015 MW2	Calcium	ICP-MS	Annual	93.50	N/A mg/l		no	
09/04/2015 MW2	Chromium	ICP-MS	Annual	<20.00	N/A ug/l	37.5	no	
09/04/2015 MW2	Copper	ICP-MS	Annual	<20.00	N/A ug/l	1500	no	
09/04/2015 MW2	Iron	ICP-MS	Annual	398.00	N/A ug/l		no	
09/04/2015 MW2	Lead	ICP-MS	Annual	<20.00	N/A ug/l	18.75	no	
09/04/2015 MW2	Magnesium	ICP-MS	Annual	12.60	N/A mg/l		no	
09/04/2015 MW2	Zinc	ICP-MS	Annual	46.10	N/A ug/l		no	
09/04/2015 MW2	Mercury	ICP-MS	Annual	<10.00	N/A mg/l	0.00075	no	
09/04/2015 MW2	Manganese	ICP-MS	Annual	58.20	N/A ug/I		no	
09/04/2015 MW2	Phosphate	konelab aquakem SOP 2061	Annual	0.01	N/A mg/l PO <sub>4</sub>	0.035	no	
09/04/2015 MW2	Cyanide - Tot	Steam Distillation & Colourimetry	Annual	10.00	N/A ug/I	37.5	no	
09/04/2015 MW2	Flouride	Ion Selective Electrode	Annual	0.28	N/A mg/l		no	
09/04/2015 MW2	Sulphate	konelab aquakem SOP 2062	Annual	110.91	N/A mg/I SO <sub>4</sub>	187.5	no	
09/04/2015 MW2	Total Alkalinity	konelab aguakem SOP 2064	Annual	147.49	N/A mg/l		no	
09/04/2015 MW2	Total Phosphorous	ICP-MS	Annual	0.04	N/A mg/l P		no	
09/04/2015 MW2	Total Disolved Solids	Filt /Evan & Drving @ 105°C	Annual	304.00	N/A mg/l		no	
09/04/2015 MW2	E Coli	Quanti-tray SOP 2090	Annual	<1	N/A MPN/100ml		no	
09/04/2015 MW/2	Total Coliforms	Quanti-tray SOP 2090	Annual	<1	N/A MPN/100ml		no	
09/04/2015 MW4	Ammonia	konelab aguakem SOP 2057	Quarterly	0.20	0.10 mg/l	0.065-0 175	no	
09/04/2015 M/M/4	Conductivity	Electrometry SOP 2076	Quarterly	191 00	137.25 µS/cm20°C	200_1275	no	
09/04/2015 M/M/4	nH	Electrometry SOP 2004	Quarterly	£ 10	5 90 pH units	000-10/5	no	
09/04/2015 M/M/4	Temperature	Temp Probe	Quarterly	12 20	10 70 Deg C		no	
09/04/2015 M/M/4	Chloride	konelab aguakem SOP 2065	Quarterly	20.21	20.86 mg/l	2/1-187 5	no	
09/04/2015 MM/4	Dissolved Oxygen	Oxygen Meter SOP 2005	Quarterly	7 80	6.46 mg/l O2	24-107.5	no	
09/04/2015 M/M/4	Potassium	ICP-MS	Quarterly	0.64	0.57 mg/l		no	
09/04/2015 MW4	Sodium	ICP-MS	Quarterly	18 80	14 21 mg/l	150	no	
09/04/2015 MW4	Total Oxidised Nitrogen	konelab aguakem SOP 2058	Quarterly	2 14	1 18 mg/l	130	no	
09/04/2015 MW4	Total Organic Carbon	Oxidation & Colourimetry	Quarterly	6 50	2 80 mg/l		no	
09/04/2015 MW4	Phenols	Not Known	Quarterly	0.50	0.005 mg/l		no	
09/04/2015 MW4	Boron	ICP-MS	Annual	0.010	N/A mg/l	0.75	no	
09/04/2015 MW4	Cadmium	ICP-MS	Annual	<20.02	N/A ug/l	0.75	no	
00/04/2045 14144	Calcium	ICP-MS	Annual	12 90	N/A mg/l		no	
09/04/2015INW4				12.00				
09/04/2015 MW4	Chromium	ICP-MS	Annual	<20.00	N/A ug/l	37.5	no	

	nonitoring template			LIC NO.	W0070 01	TCai	2015	
09/04/2015 MW4	Iron	ICP-MS	Annual	159.00	N/A ug/l		no	
09/04/2015 MW4	Lead	ICP-MS	Annual	<20.00	N/A ug/l	18.75	no	
09/04/2015 MW4	Magnesium	ICP-MS	Annual	3.15	N/A mg/l		no	
09/04/2015 MW4	Zinc	ICP-MS	Annual	107.00	N/A ug/l		no	
09/04/2015 MW4	Mercury	ICP-MS	Annual	<10.00	N/A mg/l	0.00075	no	
09/04/2015 MW4	Manganese	ICP-MS	Annual	<20.00	N/A ug/I		no	
09/04/2015 MW4	Phosphate	konelab aquakem SOP 2061	Annual	0.04	N/A mg/I PO <sub>4</sub>	0.035	no	
09/04/2015 MW4	Cyanide - Tot	Steam Distillation & Colourimetry	Annual	3.00	N/A ug/l	37.5	no	
09/04/2015 MW4	Flouride	Ion Selective Electrode	Annual	< 0.02	N/A mg/l		no	
09/04/2015 MW4	Sulphate	konelab aquakem SOP 2062	Annual	51.86	N/A mg/l SO <sub>4</sub>	187.5	no	
09/04/2015 MW4	Total Alkalinity	konelab aquakem SOP 2064	Annual	12.13	N/A mg/l		no	
09/04/2015 MW4	Total Phosphorous	ICP-MS	Annual	0.02	N/A mg/l P		no	
09/04/2015 MW4	Total Disolved Solids	Filt./Evap. & Drying @ 105°C	Annual	84.00	N/A mg/I		no	
09/04/2015 MW4	E. Coli	Quanti-tray SOP 2090	Annual	<1	N/A MPN/100ml		no	
09/04/2015 MW4	Total Coliforms	Quanti-tray SOP 2090	Annual	15	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 GroundwaterMonitoring Guideline Template Report at the link provided and submit separately through ALDER as a licensee return or as otherwise instructed by the EPA.								
tore information on the use of soil and groundwater standards/ generic assessment criteria (GAC) and risk assessment tools is  callable in the EPA published guidance (see the link in G31)  **Depending on location of the site and proximity to other sensitive receptors alternative Receptor based Water Quality standards should be used in addition to the GTV e.g. if the site is close to  surface water compare to Surface Water Environmental Quality Standards (SWEOS). If the site is close to a drinking water sumply compare results to the Drinking Water Standards (DWS)								

	Sample						
Date	of location			Monitoring	Maximum	Average	
sampl	ing reference	Parameter/ Substance	Methodology	frequency	Concentration	Concentration	unit
							SELECT
							SELECT

Table 3: Soil results         Sample Date of sampling       Sample location reference       Maximum Parameter/Substance       Methodology       Monitoring frequency       Maximum Concentration       Average Concentration       unit         Image: Ima								
Sample Iocation sampling     Sample Iocation reference     Parameter/Substance     Methodology     Monitoring frequency     Maximum Concentration     Average Concentration     unit       Image:	Table 3: So	oil results						
Image: Select	Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration	Average Concentration	unit
Where additional detail is required please enter it here in 200 words or less								SELECT
Where additional detail is required please enter it here in 200 words or less								SELECT
				Where additional detail is required ple	ase enter it here i	n 200 words or less		

### **Environmental Liabilities template**

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11

12

13

Financial Provision for ELRA - type

Financial provision for ELRA expiry date

Closure plan initial agreement status

Closure plan review status

Financial Provision for Closure status

Financial Provision for Closure - amount of cover

Financial Provision for Closure - type

Financial provision for Closure expiry date

SELECT

Enter expiry date

SELECT

SELECT SELECT

Specify SELECT

Enter expiry date

Year

2015

14

E	Environmental Liabilities template	Lic No:	W0070-01
	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 FLRA	Specify	
5	Another of Financial Fronsion cover required as accentined by the latest Ellin	Specify	
4	Financial Provision for ELRA status	SELECT	
5	Financial Provision for ELRA - amount of cover	Specify	

	Environmental Management Programme/Continuous Improvement Programm	e template	Lic No:	W0070-01	Year	2015
	Highlighted cells contain dropdown menu click to view		Additional Information	on		
1	Do you maintain an Environmental Mangement System (EMS) for the site. If yes, please detail in additional information	Yes	Site p	procedures make 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				
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				

<b>Environmental Management Programme</b>	nvironmental 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	2015	
. Was noise mo If yes please f	onitoring a licen fill in table N1 n	nce requirement f oise summary be	for the AER perio	od?				No	]		
Was noise mo "Checklist for Does your site When was the Have there	onitoring carried r noise measure e have a noise r e noise reductio been changes r	d out using the El ment report" inc reduction plan on plan last upda relevant to site no	PA Guidance not luded in the guid ted? bise emissions (e noise survey	e, including dance note a e.g. plant or c ?	completion s table 6? operational o	of the changes) sir	<u>Noise</u> <u>Guidance</u> <u>note NG4</u> nce the last	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 wit 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 efficie	cy summary	Lic No:	W0070-01	Year	2015

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 h energy usage reduction Is the site a member of any accredited programmes for reducing energy usage/water conservation such as the Industry Energy SEAI programme linked to the right? If yes please list them in additional information Network (LIEN) No  No  No  No  No  No  No  No  No  N				Additional information
Is the site a member of any accredited programmes for reducing energy usage/water conservation such as the SEAI - Large SEAI - Large SEAI - Large Usage reduction team in operation SEAI programme linked to the right? If yes please list them in additional information       Industry Energy No       Cork County Council I energy usage reduction team in operation operati		When did the site carry out the most recent energy efficiency audit? Please list the recommendations in table 3 below	N/A	
SEAL - Large       energy usage reduction         Is the site a member of any accredited programmes for reducing energy usage/water conservation such as the       Industry Energy         SEAL programme linked to the right? If yes please list them in additional information       Network (LIEN)         Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional       No				Cork County Council has
Is the site a member of any accredited programmes for reducing energy usage/water conservation such as the Industry Energy SEAI programme linked to the right? If yes please list them in additional information Network (LIEN) No countywide Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional		<u>SEAI - Large</u>		energy usage reduction
SEAI programme linked to the right? If yes please list them in additional information <u>Network (LIEN)</u> No countywide Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional		Is the site a member of any accredited programmes for reducing energy usage/water conservation such as the Industry Energy		team in operation
Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional		SEAI programme linked to the right? If yes please list them in additional information Network (LIEN)	No	countywide
	,	Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional		
Information N/A		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)	2.859	3.122		
Total Energy Generated (MWHrs)	0	0		
Total Renewable Energy Generated (MWHrs)	0	0		
Electricity Consumption (MWHrs)	2.859	3.122		
Fossil Fuels Consumption:	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 compare	d to overall site producti	on nlease enter this in	formation as percen	tage increase or decr

\* 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

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Table R2 Water usage on s				Water Emissions	Water Consumption		
Water use	Water extracted Previous year m3/yr.	Water extracted Current year m3/yr.	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*	Volume Discharged back to environment(m <sup>3</sup> yr):	Volume used i.e not discharged to environment e.g. released as steam m3/yr	Unaccounted for Water:
Groundwater							
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)					

Resourc	e Usage/Energy efficiency summary				Lic No:	W0070-01		Year	2015
	Table R4: Energy Audit finding recommendations								
	Date of audit	Recommendations	Description of Measures proposed	Origin of measures	Predicted energy savings %	Implementation date	Responsibility	Completion date	Status and comments
				SELECT					
				SELECT					
				SELECT					

 Unit ID
 Unit ID
 Unit ID
 Unit ID
 Unit ID
 Station Total

		OHICID	
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	2015
 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		
Total complaints open at start of reporting year Total new complaints received during reporting year Total complaints		-					
closed during reporting year							
Balance of complaints end of reporting year							

	Incidents			
				Additional information
Have any incidents occurred on site in the current report	rting year? Please list all incic	ents for current reporting		
year in Tab	le 2 below		No	
*For information on how to report and what				
constitutes an incident	What is an incident			

Table 2 Incidents su	immary		1											
			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 number of														
incidents current														
year														
Total number of														
incidents previous														
year														
% reduction/														
increase		]												

WASTE SUMMARY	Lic No:	W0070-01	Year	2015
 SECTION A-PRTR ON SITE WASTE TREATMENT AND WASTE TRANSFERS TAB- TO BE COMPLETED BY ALL I	IPPC AND WASTE FACILITIES	PRTR facility logon	dropdowr	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 accepted onto your site for recovery or disposal or treatment prior to recovery or disposal within the boundaries of your facility ?; (waste generated within your 1 boundaries is to be captured through PRTR reporting)	No	
If yes please enter details in table 1 below		
2 Did your site have any rejected consignments of waste in the current reporting year? If yes please give a brief explanation in the additional information	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 limit for your site (total tonnes/annum)	EURC code	Source of waste accepted	Description of waste accepted Please enter an accurate and detailed description - which applies to relevant EWC code <u>European Waste</u> <u>Catalogue EWC codes</u>	Quantity of waste accepted in current reporting year (tonnes)	Quantity of waste accepted in previous reporting year (tonnes)	Reduction/ Increase over previous year +/ %	Reason for reduction/ increase from previous reporting year	Packaging Content (%)- only applies if the waste has a packaging component	Disposal/Recovery or treatment operation carried out at your site and the description of this operation	Quantity of waste remaining on site at the end of reporting year (tonnes)	Comments -

#### SECTION C-TO BE COMPLETED BY ALL WASTE FACILITIES (waste transfer stations, Composters, Material recovery facilities etc) EXCEPT LANDFILL SITES

4 Is all waste processing infrastructure as required by your licence and approved by the Agency in place? If no please list waste processing infrastructure required onsite

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 a	and to	nnage-	landfill	only

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

#### Table 3 General information-Landfill only

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

SELECT	
SELECT	
SELECT	
SELECT	
SELECT	

WASTE SUMMARY					Lic No:	W0070-01		Year	2015
Table 4 Environmen	ntal monitoring-landfill only	Landfill Manual-Monitoring Sta	ndards			•	•		_
Was meterological monitoring in compliance with Landfill Directive (LD) standard in reporting year +	Was leachate monitored in compliance with LD standard in reporting year	Was Landfill Gas monitored in compliance with LD standard in reporting year	Was SW monitored in compliance with LD standard in reporting year	Have GW trigger levels been established	Were emission limit values agreed with the Agency (ELVs)	Was topography of the site surveyed in reporting year	Has the statement under S53(A)(5) of WMA been submitted in reporting year	Comments	
N/A	Yes	Yes	Yes	Yes	Yes	No	No		1
Table 5 Capping-Lar Area uncapped*	ndfill only 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	What materials are used in the cap	Comments			
N/A - Landfill Closed									
*please note this includes	s daily cover area						-		
Table 6 Leachate-La	indfill only								
Is leachate from your site Is leachate released to su	treated in a Waste Water Treatment Pla Inface water? If yes please complete lead	nt? hate mass load information below	N			SELECT SELECT	I		

				2		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
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	Bowen concepted (MW / KWb)	Lond on eite or to notional mid	Was surface emissions monitoring performed during the reporting	Commente				
by LFG System in5	Fower generated (MW/KWII)	Used on-site of to national grid	year:	Comments				
CH <sub>4</sub> - 7041	0	0	No					



Guidance to completing the PRTR workbook

# **PRTR Returns Workbook**

/ersion 1.1.19

## REFERENCE YEAR 2015

### **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

0.0
0
0
1

### 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 200	)2)
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	e for on-	
site trea	atment (either	recovery or d	isposal	
		acti	vities) ?	

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

### 4.1 RELEASES TO AIR Link to previous years emissions data

| PRTR# : W0070 | Facility Name : Benduff Landfill Site | Filename : W0070-01 2015AER.xlsx | Return Year : 2015 |

04/03/2016 15:15

#### SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO AIR				Please enter all quantities	in this section in KGs				
POLLUTANT			М	ETHOD		QUANTITY			
				Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	
01	Methane (CH4)	С	OTH	LandGEM Modelling	0.0	193351.0	0.0	) 193351.0	

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

### SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO AIR			Please enter all quantities	in this section in KGs					
POLLUTANT			N	METHOD		QUANTITY			
				Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	
					0.0	) 0	.0 0.0	0.0	

\* 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 KG	s					
POLLUTANT			I	METHOD			QUANTITY				
				Method Used							
Pollutant No.	Name	M/C/E	Method Code	Designation or Descript	tion	Emission Point 1	T (Total) KG/Year	Α (	(Accidental) KG/Year	F (Fugitive) KG/Year	r
						0.0		0.0	0.0	0	0.0

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

Additional Data Requested from Landfill operators									
For the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide summary data on landfill gas (Methane) flared or utilised on their facilities to accompany the figures for total methane generated. Operators should only report their Net methane (CH4) emission to the environment under T(total) KQ/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:									
Landfill:	Benduff Landfill Site				1				
Please enter summary data on the quantities of methane flared and / or utilised			Meth	nod 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)	198166.0	с	отн	Landgem	N/A				
Methane flared	4815.0	С	ОТН	Landfill Gas Survey	500.0	Total Flaring Capacity)			
Methane utilised in engine/s	0.0				0.0	Total Utilising Capacity)			
Net methane emission (as reported in Section A above)	193351.0	С	ОТН	LandGEM Modelling	N/A				