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se include an appendix to the AER template and merge it as part of the AER PDF document. The excel  
ately so that all text is readable before it is converted to PDF document.

Facility Information Summary	
AER Reporting Year	2016
Licence Register Number	w0161-02
Name of site	Bottlehill landfill
Site Location	Burnfort , Mallow ,Co.Cork
NACE Code	
Class/Classes of Activity	
National Grid Reference (6E, 6 N)	
<p>A description of the activities/processes at the site for the reporting year. This should include information such as production increases or decreases on site, any infrastructural changes, environmental performance which was measured during the reporting year <b>and an overview of compliance with your licence listing all exceedances of licence limits (where applicable) and what they relate to e.g. air, water, noise.</b></p>	<p>The Environmental Protection Agency (EPA) issued Cork County Council with a waste Licence No W0161-01 for Bottlehill landfill on the 25th June 2004. In accordance with the requirement of Condition 11.61.1 of the waste licence. The site is located 10 KM from Mallow and 3.3km SW of Burnfort Village and 3.65 KM east of the N20. In 2012 Cork County Council requested a reduction in Environmental Monitoring as Bottlehill Landfill was inactive. The following reductions were granted by the EPA. Annual surface water and ground water monitoring to include annual parameters. Suspension of noise, dust, ecology and gas monitoring until 6 months prior to the landfill becoming operational. These changes are reflected in the 2016 AER.</p>

**Declaration:**

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

Signature		Date
Group/Facility manager	Marie Mortell	21/3/2017
(or nominated, suitably qualified and experienced deputy)		

**AIR-summary template** Lic No: 0 Year 2016

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 do not need to complete the tables

No	
----	--

**Periodic/Non-Continuous Monitoring**

- 2 Are there any results in breach of licence requirements? If yes  
Table A1 b
- 3 Was all monitoring carried out in accordance with EPA guidance note AG2 and using the basic air monitoring checklist?

Air monitoring suspended as landfill is not operational


**Table A1: Licensed Mass Emissions/Ambient da**

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

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

<b>AIR-summary template</b>	Lic No: 0	Year: 2016
<b>Continuous Monitoring</b>		

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)	SELECT	
5	Did continuous monitoring equipment experience downtime? If yes please record downtime in table A2 below	SELECT	
6	Do you have a proactive service agreement for each piece of continuous monitoring equipment?	SELECT	
7	Did your site experience any abatement system bypasses? If yes please detail them in table A3 below	SELECT	

**Table A2: Summary of average emissions -continuous monitoring**

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



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

2 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 only any evidence of contamination noted during visual inspections

Additional information	
Yes	
No	

**Table W1 Storm water monitoring**

Location reference	Location relative to site activities	PRTR Parameter	Licensed Parameter	Monitoring date	ELV or trigger level in licence or any revision thereof*	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Comments
SW1	downstream	Alkalinity	SELECT	17/2/2016	NONE	All values < ELV	14.99	mg/l	yes	no upward trend
	downstream	SELECT	Boron	17/02/2016	1.0 MG/L	All values < ELV	<0.01	mg/l	yes	no upward trend
	downstream	Chromium and compounds (as Cr)	SELECT	17/2/2016	0.03 MG/L	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	Copper and compounds (as Cu)	SELECT	17/2/2016	0.03 mg/l	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	Cadmium and compounds (as Cd)	SELECT	17/2/2016	0.005 MG/L	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	SELECT	Iron	17/2/2016	0.2 mg/l	All values < ELV	405	ug/l	yes	no upward trend
	downstream	Lead and compounds (as Pb)	SELECT	17/2/2016		All values < ELV	<20	ug/l	yes	no upward trend
	downstream	SELECT	Magnesium	17/2/2016	50 mg/l	All values < ELV	1.29	mg/l	yes	no upward trend
	downstream	SELECT	Manganese (as Mn)	17/2/2016	0.05 mg/l	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	Mercury and compounds (as Hg)	SELECT	17/2/2016	0.001 mg/l	All values < ELV	<10	ug/l	yes	no upward trend
	downstream	Nickel and compounds (as Ni)	SELECT	17/2/2016	0.05 mg/l	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	SELECT	Potassium	17/2/2016	5 mg/l	All values < ELV	0.52	ug/l	yes	no upward trend
	downstream	SELECT	Sulphate	17/2/2016	200 mg/l	All values < ELV	<2.5	mg/l	yes	no upward trend
	downstream	SELECT	Total Oxidised Nitrogen (TON)	17/2/2016	no abnormal change	All values < ELV	0.52	mg/l	yes	no upward trend
	downstream	SELECT	Ortho-phosphate (as PO4)	17/2/2016		All values < ELV	0.02	mg/l	yes	no upward trend
	downstream	Zinc and compounds (as Zn)	SELECT	17/2/2016	0.1 mg/l	All values < ELV	23	mg/l	yes	no upward trend
	downstream	Total phosphorus	SELECT	17/2/2016		All values < ELV	<0.01	ug/l	yes	no upward trend
SW1A	upstream	Alkalinity	SELECT	17/2/2016		All values < ELV	7.37	mg/l	yes	no upward trend
	upstream	SELECT	Boron			All values < ELV	<0.01	mg/l	yes	no upward trend
	upstream	Chromium and compounds (as Cr)	SELECT	17/2/2016		All values < ELV	<20	ug/l	yes	no upward trend
	upstream	Copper and compounds (as Cu)	SELECT	17/2/2016		All values < ELV	<20	ug/l	yes	no upward trend
	upstream	Cadmium and compounds (as Cd)	SELECT	17/2/2016		All values < ELV	<20	ug/l	yes	no upward trend
	upstream	SELECT	Iron	17/2/2016		All values < ELV	251	ug/l	yes	no upward trend
	upstream	Lead and compounds (as Pb)	SELECT	17/2/2016		All values < ELV	<20	ug/l	yes	no upward trend
	upstream	SELECT	Magnesium	17/2/2016		All values < ELV	1.35	mg/l	yes	no upward trend
	upstream	SELECT	Manganese (as Mn)	17/2/2016		All values < ELV	<20	ug/l	yes	no upward trend

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)				Lic No:	0	Year	2016		
	upstream	cury and compounds (as	SELECT	17/2/2016	All values < ELV	<10	ug/l	yes	no upward trend
	upstream	ckel and compounds (as	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	upstream	SELECT	Potassium	17/2/2016	All values < ELV	<0.5	ug/l	yes	no upward trend
	upstream	SELECT	Sulphate	17/2/2016	All values < ELV	2.65	mg/l	yes	no upward trend
	upstream	SELECT	Total Oxidised Nitrogen (TON)	17/2/2016	All values < ELV	0.5	mg/l	yes	no upward trend
	upstream	SELECT	Ortho-phosphate (as PO4)	17/2/2016	All values < ELV	0.02	mg/l	yes	no upward trend
	upstream	inc and compounds (as Z	SELECT	17/2/2016	All values < ELV	20	mg/l	yes	no upward trend
	upstream	Total phosphorus	SELECT	17/2/2016	All values < ELV	<0.01	ug/l	yes	no upward trend
SW2	onsite	Alkalinity	SELECT	17/2/2016	All values < ELV	1.96	mg/l	yes	no upward trend
	onsite	SELECT	Boron		All values < ELV	<0.01	mg/l	yes	no upward trend
	onsite	mium and compounds (a	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	onsite	pper and compounds (as	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	onsite	mium and compounds (as	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	onsite	SELECT	Iron	17/2/2016	All values < ELV	375	ug/l	yes	no upward trend
	onsite	cad and compounds (as P	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	onsite	SELECT	Magnesium	17/2/2016	All values < ELV	1.11	mg/l	yes	no upward trend
	onsite	SELECT	Manganese (as Mn)	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	onsite	cury and compounds (as	SELECT	17/2/2016	All values < ELV	<10	ug/l	yes	no upward trend
	onsite	ckel and compounds (as	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	onsite	SELECT	Potassium	17/2/2016	All values < ELV	0.55	ug/l	yes	no upward trend
	onsite	SELECT	Sulphate	17/2/2016	All values < ELV	<2.5	mg/l	yes	no upward trend
	onsite	SELECT	Total Oxidised Nitrogen (TON)	17/2/2016	All values < ELV	<0.5	mg/l	yes	no upward trend
	onsite	SELECT	Ortho-phosphate (as PO4)	17/2/2016	All values < ELV	0.03	mg/l	yes	no upward trend
	onsite	inc and compounds (as Z	SELECT	17/2/2016	All values < ELV	29	mg/l	yes	no upward trend
	onsite	Total phosphorus	SELECT	17/2/2016	All values < ELV	<0.01	ug/l	yes	no upward trend
sw3	downstream	Alkalinity	SELECT	17/2/2016	All values < ELV	12.81	mg/l	yes	no upward trend
	downstream	SELECT	Boron		All values < ELV	<0.01	mg/l	yes	no upward trend
	downstream	mium and compounds (a	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	pper and compounds (as	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	mium and compounds (as	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	SELECT	Iron	17/2/2016	All values < ELV	517	ug/l	yes	no upward trend
	downstream	cad and compounds (as P	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	SELECT	Magnesium	17/2/2016	All values < ELV	1.65	mg/l	yes	no upward trend
	downstream	SELECT	Manganese (as Mn)	17/2/2016	All values < ELV	66	ug/l	yes	no upward trend



AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)				Lic No:	0	Year	2016		
	downstream	cury and compounds (as	SELECT	17/2/2016	All values < ELV	<10	ug/l	yes	no upward trend
	downstream	ckel and compounds (as	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	SELECT	Potassium	17/2/2016	All values < ELV	0.53	ug/l	yes	no upward trend
	downstream	SELECT	Sulphate	17/2/2016	All values < ELV	<2.5	mg/l	yes	no upward trend
	downstream	SELECT	Total Oxidised Nitrogen (TON)	17/2/2016	All values < ELV	1.44	mg/l	yes	no upward trend
	downstream	SELECT	Ortho-phosphate (as PO4)	17/2/2016	All values < ELV	0.02	mg/l	yes	no upward trend
	downstream	inc and compounds (as Z	SELECT	17/2/2016	All values < ELV	<20	mg/l	yes	no upward trend
	downstream	Total phosphorus	SELECT	17/2/2016	All values < ELV	0.02	ug/l	yes	no upward trend
SW4	downstream	Alkalinity	SELECT	17/2/2016	All values < ELV	29.84	mg/l	yes	no upward trend
	downstream	SELECT	Boron	17/2/2016	All values < ELV	<0.01	mg/l	yes	no upward trend
	downstream	mium and compounds (a	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	pper and compounds (as	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	mium and compounds (as	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	SELECT	Iron	17/2/2016	All values < ELV	531	ug/l	yes	no upward trend
	downstream	cad and compounds (as P	SELECT	17/2/2016	All values < ELV	<20	mg/l	yes	no upward trend
	downstream	SELECT	Magnesium	17/2/2016	All values < ELV	2.83	ug/l	yes	no upward trend
	downstream	SELECT	Manganese (as Mn)	17/2/2016	All values < ELV	71	ug/l	yes	no upward trend
	downstream	cury and compounds (as	SELECT	17/2/2016	All values < ELV	<10	ug/l	yes	no upward trend
	downstream	ckel and compounds (as	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	SELECT	Potassium	17/2/2016	All values < ELV	2.52	mg/l	yes	no upward trend
	downstream	SELECT	Sulphate	17/2/2016	All values < ELV	3.71	mg/l	yes	no upward trend
	downstream	SELECT	Total Oxidised Nitrogen (TON)	17/2/2016	All values < ELV	1.17	mg/l	yes	no upward trend
	downstream	SELECT	Ortho-phosphate (as PO4)	17/2/2016	All values < ELV	0.16	mg/l	yes	no upward trend
	downstream	inc and compounds (as Z	SELECT	17/2/2016	All values < ELV	42	ug/l	yes	no upward trend
	downstream	Total phosphorus	SELECT	17/2/2016	All values < ELV	0.09	mg/l	yes	no upward trend
sw5	downstream	Alkalinity	SELECT	17/2/2016	All values < ELV	27.76	mg/l	yes	no upward trend
	downstream	SELECT	Boron	17/2/2016	All values < ELV	<0.01	mg/l	yes	no upward trend
	downstream	mium and compounds (a	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	pper and compounds (as	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	mium and compounds (as	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	SELECT	Iron	17/2/2016	All values < ELV	522	ug/l	yes	no upward trend
	downstream	cad and compounds (as P	SELECT	17/2/2016	All values < ELV	<20	mg/l	yes	no upward trend
	downstream	SELECT	Magnesium	17/2/2016	All values < ELV	2.7	ug/l	yes	no upward trend
	downstream	SELECT	Manganese (as Mn)	17/2/2016	All values < ELV	87	ug/l	yes	no upward trend

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)				Lic No:	0	Year	2016		
	downstream	cury and compounds (as	SELECT	17/2/2016	All values < ELV	<10	ug/l	yes	no upward trend
	downstream	ckel and compounds (as	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	SELECT	Potassium	17/2/2016	All values < ELV	2.18	mg/l	yes	no upward trend
	downstream	SELECT	Sulphate	17/2/2016	All values < ELV	3.56	mg/l	yes	no upward trend
	downstream	SELECT	Total Oxidised Nitrogen (TON)	17/2/2016	All values < ELV	1.13	mg/l	yes	no upward trend
	downstream	SELECT	Ortho-phosphate (as PO4)	17/2/2016	All values < ELV	0.14	mg/l	yes	no upward trend
	downstream	inc and compounds (as Z	SELECT	17/2/2016	All values < ELV	23	ug/l	yes	no upward trend
	downstream	Total phosphorus	SELECT	17/2/2016	All values < ELV	0.07	mg/l	yes	no upward trend
SW6	downstream	Alkalinity	SELECT	17/2/2016	All values < ELV	15.73	mg/l	yes	no upward trend
	downstream	SELECT	Boron	17/2/2016	All values < ELV	<0.01	mg/l	yes	no upward trend
	downstream	mium and compounds (a	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	pper and compounds (as	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	mium and compounds (as	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	SELECT	Iron	17/2/2016	All values < ELV	413	ug/l	yes	no upward trend
	downstream	cad and compounds (as P	SELECT	17/2/2016	All values < ELV	<20	mg/l	yes	no upward trend
	downstream	SELECT	Magnesium	17/2/2016	All values < ELV	1.64	ug/l	yes	no upward trend
	downstream	SELECT	Manganese (as Mn)	17/2/2016	All values < ELV	49	ug/l	yes	no upward trend
	downstream	cury and compounds (as	SELECT	17/2/2016	All values < ELV	<10	ug/l	yes	no upward trend
	downstream	ckel and compounds (as	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	SELECT	Potassium	17/2/2016	All values < ELV	0.81	mg/l	yes	no upward trend
	downstream	SELECT	Sulphate	17/2/2016	All values < ELV	<2.5	mg/l	yes	no upward trend
	downstream	SELECT	Total Oxidised Nitrogen (TON)	17/2/2016	All values < ELV	0.64	mg/l	yes	no upward trend
	downstream	SELECT	Ortho-phosphate (as PO4)	17/2/2016	All values < ELV	0.04	mg/l	yes	no upward trend
	downstream	inc and compounds (as Z	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	Total phosphorus	SELECT	17/2/2016	All values < ELV	0.02	mg/l	yes	no upward trend
SW7	downstream	Alkalinity	SELECT	17/2/2016	All values < ELV	25.06	mg/l	yes	no upward trend
	downstream	SELECT	Boron	17/2/2016	All values < ELV	<0.01	mg/l	yes	no upward trend
	downstream	mium and compounds (a	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	pper and compounds (as	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	mium and compounds (as	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend
	downstream	SELECT	Iron	17/2/2016	All values < ELV	393	ug/l	yes	no upward trend
	downstream	cad and compounds (as P	SELECT	17/2/2016	All values < ELV	,20	mg/l	yes	no upward trend
	downstream	SELECT	Magnesium	17/2/2016	All values < ELV	2.47	ug/l	yes	no upward trend
	downstream	SELECT	Manganese (as Mn)	17/2/2016	All values < ELV	54	ug/l	yes	no upward trend

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)				Lic No:	0		Year 2016			
	downstream	cury and compounds (as	SELECT	17/2/2016	All values < ELV	<10	ug/l	yes	no upward trend	
	downstream	ckel and compounds (as	SELECT	17/2/2016	All values < ELV	<20	ug/l	yes	no upward trend	
	downstream	SELECT	Potassium	17/2/2016	All values < ELV	1.69	mg/l	yes	no upward trend	
	downstream	SELECT	Sulphate	17/2/2016	All values < ELV	4.86	mg/l	yes	no upward trend	
	downstream	SELECT	Total Oxidised Nitrogen (TON)	17/2/2016	All values < ELV	1.1	mg/l	yes	no upward trend	
	downstream	SELECT	Ortho-phosphate (as PO4)	17/2/2016	All values < ELV	0.13	mg/l	yes	no upward trend	
	downstream	inc and compounds (as Z	SELECT	17/2/2016	All values < ELV	44	ug/l	yes	no upward trend	
	downstream	Total phosphorus	SELECT	17/2/2016	All values < ELV	0.03	mg/l	yes	no upward trend	

\*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

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

4 box

SELECT	Additional information
SELECT	

[External /Internal Lab Quality checklist](#) [Assessment of results checklist](#)

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

Emission reference no:	Emission released to	Parameter/ Substance <sup>Note 1</sup>	Type of sample	Frequency of monitoring	Averaging period	ELV or trigger values in licence or any revision thereof <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	SELECT		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

SELECT	
--------	--

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

6 Did continuous monitoring equipment experience downtime? If yes please record downtime in table W4 below

SELECT	
--------	--

7 Do you have a proactive service contract for each piece of continuous monitoring equipment on site?

SELECT	
--------	--

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

SELECT	
--------	--

**Table W4: Summary of average emissions -continuous monitoring**

Emission reference no:	Emission released to	Parameter/ Substance	ELV or trigger values in licence or any revision thereof	Averaging Period	Compliance Criteria	Units of measurement	Annual Emission for current reporting year (kg)	% change +/- from previous reporting year	Monitoring Equipment downtime (hours)	Number of ELV exceedences in reporting year	Comments
	SELECT	SELECT		SELECT	SELECT	SELECT					
	SELECT	SELECT		SELECT	SELECT	SELECT					

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

**Table W5: Abatement system bypass reporting table**

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

\*Measures taken or proposed to reduce or limit bypass frequency

**Bund testing**

dropdown menu click to see options

**Additional information**

Are you required by your licence to undertake integrity testing on bunds and containment structures? If yes please fill out table B1 below listing all **new bunds and containment structures** on site, in addition to **all bunds which failed the table below, please include all bunds outside the licenced testin**

- 1 Please provide integrity testing frequency period
- 2 Does the site maintain a register of bunds, underground pipelines (i
- 3 type units and mobile bunds)
- 4 How many bunds are on site?
- 5 How many of these bunds have been tested within the required test
- 6 How many mobile bunds are on site?
- 7 Are the mobile bunds included in the bund test schedule?
- 8 How many of these mobile bunds have been tested within the required test schedule?
- 9 How many sumps on site are included in the integrity test schedule?
- 10 How many of these sumps are integrity tested within the test schedule?

Suspended until landfill operational

the bunds must be listed in  
ers refers to "Chemstore"

No	
SELECT	
SELECT	
SELECT	
SELECT	
SELECT	
SELECT	
SELECT	
SELECT	
SELECT	
SELECT	

- Please list any sump integrity failures in table B1**
- 11 Do all sumps and chambers have high level liquid alarms?
  - 12 If yes to Q11 are these failsafe systems included in a maintenance and testing programme?
  - 13 Is the Fire Water Retention Pond included in your integrity test programme?

Table B1: Summary details of bund /containment structure integrity test														
Bund/Containment structure ID	Type	Specify Other type	Product containment	Actual capacity	Capacity required*	Type of integrity test	Other test type	Test date	Integrity reports maintained on site?	Results of test	Integrity test failure explanation <50 words	Corrective action taken	Scheduled date for retest	Results of retest (if in current reporting year)
	SELECT					SELECT			SELECT	SELECT		SELECT		
	SELECT					SELECT			SELECT	SELECT		SELECT		

\* Capacity required should comply with 25% or 110% containment rule as detailed in your licence

Has integrity testing been carried out in accordance with licence requirements and are all structures tested in line with BS8007/EPA Guidance?

- 15 Are channels/transfer systems to remote containment systems tested?
- 17 Are channels/transfer systems compliant in both integrity and available volume?

Commentary	
SELECT	
SELECT	
SELECT	

**Pipeline/underground structure testing**

Are you required by your licence to undertake integrity testing\* on underground structures e.g. pipelines or sumps etc? if yes please fill out table 2 below listing all underground structures and pipelines on site **which failed the integrity test and all which have not been tested within the integrity test period as specified**

- 1 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 current reporting year)
	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT				SELECT

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

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		Comments	
1	Are you required to carry out groundwater monitoring as part of your licence requirements?	yes	
2	Are you required to carry out soil monitoring as part of your licence requirements?	no	
3	Do you extract groundwater for use on site? If yes please specify use in comment section	no	
4	Do monitoring results show that groundwater generic assessment criteria such as GTVs or IGVs are exceeded or is there an upward trend in results for a substance? If yes, please complete the Groundwater Monitoring Guideline Template Report (link in cell G8) and submit separately through ALDER as a licensee return AND answer questions 5-12 below.	no	
5	Is the contamination related to operations at the facility (either current and/or historic)	no	
6	Have actions been taken to address contamination issues? If yes please summarise remediation strategies proposed/undertaken for the site	SELECT	
7	Please specify the proposed time frame for the remediation strategy	SELECT	
8	Is there a licence condition to carry out/update ELRA for the site?	SELECT	
9	Has any type of risk assessment been carried out for the site?	yes	
10	Has a Conceptual Site Model been developed for the site?	yes	
11	Have potential receptors been identified on and off site?	yes	
12	Is there evidence that contamination is migrating offsite?	no	

Please provide an interpretation of groundwater monitoring data in the interpretation box below or if you require additional space please include a groundwater/contaminated land monitoring results interpretation as an additional section in this AER

Please enter interpretation of data here

**Table 1: Upgradient Groundwater monitoring results**

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration++	Average Concentration+	unit	GTV's*	SW EQS	Upward trend in pollutant concentration over last 5 years of monitoring data
17/2/2016	MW2 S	Alkalinity		Annual	8.24		SELECT		SW EQS	no
		Boron	ICP-MS		0.05		SELECT	2.0 MG/L	SW EQS	no
		Cadmium	ICP-MS		<20		SELECT	0.005 mg/l	SW EQS	no
		Chromium	ICP-MS		<20		SELECT	0.03 mg/l	SW EQS	no
		calcium	ICP-OES		3.22		SELECT	-	SW EQS	no
		copper	ICP-MS		<20		SELECT	0.03 mg/l	SW EQS	no
		cyanide	APHA 4500 CN		<0.001		SELECT	0.01 mg/l	SW EQS	no
		Iron	ICP-MS		375		SELECT	1.0 mg/l	SW EQS	no
		Lead	ICP-MS		<20		SELECT	0.01 mg/l	SW EQS	no
		Mercury	ICP-MS		<10		SELECT	0.001 mg/l	SW EQS	no
		Manganese	ICP-MS		22		SELECT	0.3 mg/l	SW EQS	no
		magnesium	ICP-OES		0.76		SELECT	-	SW EQS	no
		Nickle	ICP-MS		<20		SELECT	0.05 mg/l	SW EQS	no
		potassium	ICP-OES		<0.5		SELECT	5 mg/l	SW EQS	no
		sodium	Aquakem 250 auto analyser		9.37		SELECT	-	SW EQS	no
		Sulphates	Aquakem 250 auto analyser		10.31		SELECT	200 mg/l	SW EQS	no

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		TDS	APHA 2110B Aquakem 250 auto analyser	29		SELECT	-	SW EQS	no
		TON		0.54		SELECT	-	SW EQS	no
		Total.Coilforms	19	<1		SELECT	-	SW EQS	no
		Faecal.Coilforms	smp 019	<1		SELECT	-	SW EQS	no
		SVOC	GC-MS	nr		SELECT	<10 ug/l	SW EQS	no
		VOC	GC-MS	nr		SELECT	<10 ug/l	SW EQS	no
		Selenium		nr		SELECT		SW EQS	no
		Pesticides	GC-MS	nr		SELECT	0.375 ug/l	SW EQS	no
17/2/2016	MW2 D	Alkalinity		annual	40.29	SELECT		SW EQS	no
		Boron			0.04	SELECT	2.0 MG/L	SW EQS	no
		Cadnium			<20	SELECT	0.005 mg/l	SW EQS	no
		Chromium			<20	SELECT	0.03 mg/l	SW EQS	no
		calcium			14.6	SELECT	-	SW EQS	no
		copper			<20	SELECT	0.03 mg/l	SW EQS	no
		cyanide			0.003	SELECT	0.01 mg/l	SW EQS	no
		Iron			103	SELECT	1.0 mg/l	SW EQS	no
		Lead			<20	SELECT	0.01 mg/l	SW EQS	no
		Mercury			<10	SELECT	0.001 mg/l	SW EQS	no
		Manganese			75	SELECT	0.3 mg/l	SW EQS	no
		magnesium			2.45	SELECT	-	SW EQS	no
		Nickle			<20	SELECT	0.05 mg/l	SW EQS	no
		potassium			0.64	SELECT	5 mg/l	SW EQS	no
		sodium			7.66	SELECT	-	SW EQS	no
		Sulphates			6.63	SELECT	200 mg/l	SW EQS	no
		TDS			55	SELECT	-	SW EQS	no
		TON			0.58	SELECT	-	SW EQS	no
		Total.Coilforms			<1	SELECT	-	SW EQS	no
		Faecal.Coilforms			<1	SELECT	-	SW EQS	no
		SVOC			nr	SELECT	<10 ug/l	SW EQS	no
		VOC			nr	SELECT	<10 ug/l	SW EQS	no
		Selenium			nr	SELECT		SW EQS	no
		Pesticides			nr	SELECT	0.375 ug/l	SW EQS	no
17/2/2016	MW 4 S	Alkalinity		annual	2.99	SELECT		SW EQS	no
		Boron			0.03	SELECT	2.0 MG/L	SW EQS	no
		Cadnium			<20	SELECT	0.005 mg/l	SW EQS	no
		Chromium			<20	SELECT	0.03 mg/l	SW EQS	no
		calcium			1.03	SELECT	-	SW EQS	no
		copper			<20	SELECT	0.03 mg/l	SW EQS	no
		cyanide			0.002	SELECT	0.01 mg/l	SW EQS	no
		Iron			151	SELECT	1.0 mg/l	SW EQS	no
		Lead			<20	SELECT	0.01 mg/l	SW EQS	no
		Mercury			<20	SELECT	0.001 mg/l	SW EQS	no
		Manganese			22	SELECT	0.3 mg/l	SW EQS	no
		magnesium			1.23	SELECT	-	SW EQS	no
		Nickle			<20	SELECT	0.05 mg/l	SW EQS	no
		potassium			<0.5	SELECT	5 mg/l	SW EQS	no
		sodium			8.37	SELECT	-	SW EQS	no
		Sulphates			6.68	SELECT	200 mg/l	SW EQS	no
		TDS			28.7	SELECT	-	SW EQS	no
		TON			<0.5	SELECT		SW EQS	no

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		Total.Coilforms		<1		SELECT	-	SW EQS	no
		Faecal.Coilforms		<1		SELECT	-	SW EQS	no
		SVOC				SELECT	<10 ug/l	SW EQS	no
		VOC				SELECT	<10 ug/l	SW EQS	no
		Selenium				SELECT		SW EQS	no
		Pesticides				SELECT	0.375 ug/l	SW EQS	no
17/2/2016	MW4 D	Alkalinity	annual	42.45		SELECT		SW EQS	no
		Boron		0.02		SELECT	2.0 MG/L	SW EQS	no
		Cadnium		<20		SELECT	0.005 mg/l	SW EQS	no
		Chromium		<20		SELECT	0.03 mg/l	SW EQS	no
		calcium		14.9		SELECT	-	SW EQS	no
		copper		<20		SELECT	0.03 mg/l	SW EQS	no
		cyanide		0.011		SELECT	0.01 mg/l	SW EQS	no
		Iron		138		SELECT	1.0 mg/l	SW EQS	no
		Lead		<20		SELECT	0.01 mg/l	SW EQS	no
		Mercury		<20		SELECT	0.001 mg/l	SW EQS	no
		Manganese		<20		SELECT	0.3 mg/l	SW EQS	no
		magnesium		24		SELECT	-	SW EQS	no
		Nickle		2.34		SELECT	0.05 mg/l	SW EQS	no
		potassium		0.6		SELECT	5 mg/l	SW EQS	no
		sodium		7.5		SELECT	-	SW EQS	no
		Sulphates		7.03		SELECT	200 mg/l	SW EQS	no
		TDS		56.3		SELECT	-	SW EQS	no
		TON		0.8		SELECT		SW EQS	no
		Total.Coilforms		<1		SELECT	-	SW EQS	no
		Faecal.Coilforms		<1		SELECT	-	SW EQS	no
		SVOC				SELECT	<10 ug/l	SW EQS	no
		VOC				SELECT	<10 ug/l	SW EQS	no
		Selenium				SELECT		SW EQS	no
		Pesticides				SELECT	0.375 ug/l	SW EQS	no

.+ where average indicates arithmetic mean

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

**Table 2: Downgradient Groundwater monitoring results**

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration	Average Concentration	unit	GTV's*	SELECT**	Upward trend in yearly average pollutant concentration over last 5 years of monitoring data
17/2/2016	MW11 S	Alkalinity		annual	47.61		mg/l		SW EQS	no
		Boron			0.01		mg/l	2.0 MG/L	SW EQS	no
		Cadnium			<20		ug/l	0.005 mg/l	SW EQS	no
		Chromium			<20		ug/l	0.03 mg/l	SW EQS	no
		calcium			10.5		mg/l	-	SW EQS	no
		copper			<20		ug/l	0.03 mg/l	SW EQS	no
		cyanide			0.007		ug/l	0.01 mg/l	SW EQS	no
		Iron			3637		ug/l	1.0 mg/l	SW EQS	no
		Lead			<20		ug/l	0.01 mg/l	SW EQS	no
		Mercury			<20		ug/l	0.001 mg/l	SW EQS	no



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		Manganese		495	mg/l	0.3 mg/l	SW EQS	no
		magnesium		5.84	mg/l	-	SW EQS	no
		Nickle		<20	ug/l	0.05 mg/l	SW EQS	no
		potassium		1.17	mg/l	5 mg/l	SW EQS	no
		sodium		10.9	mg/l	-	SW EQS	no
		Sulphates		6.66	mg/l	200 mg/l	SW EQS	no
		TDS		67.7	mg/l	-	SW EQS	no
		TON		0.53	mg/l	-	SW EQS	no
		Total.Coilforms		<1	SELECT	-	SW EQS	no
		Faecal.Coilforms		<1	SELECT	-	SW EQS	no
		SVOC		<10	ug/l	<10 ug/l	SW EQS	no
		VOC		<10	ug/l	<10 ug/l	SW EQS	no
		Selenium		<10	ug/l	-	SW EQS	no
		Pesticides		<10	ug/l	0.375 ug/l	SW EQS	no
17/2/2016	MW11 D	Alkalinity	annual	22.82	mg/l	-	SW EQS	no
		Boron		0.01	mg/l	2.0 MG/L	SW EQS	no
		Cadnium		<20	ug/l	0.005 mg/l	SW EQS	no
		Chromium		<20	ug/l	0.03 mg/l	SW EQS	no
		calcium		3.65	mg/l	-	SW EQS	no
		copper		<20	ug/l	0.03 mg/l	SW EQS	no
		cyanide		0.009	ug/l	0.01 mg/l	SW EQS	no
		Iron		2291	ug/l	1.0 mg/l	SW EQS	no
		Lead		<20	ug/l	0.01 mg/l	SW EQS	no
		Mercury		<20	ug/l	0.001 mg/l	SW EQS	no
		Manganese		125	mg/l	0.3 mg/l	SW EQS	no
		magnesium		2.17	mg/l	-	SW EQS	no
		Nickle		<20	ug/l	0.05 mg/l	SW EQS	no
		potassium		0.71	mg/l	5 mg/l	SW EQS	no
		sodium		8.76	mg/l	-	SW EQS	no
		Sulphates		7.79	mg/l	200 mg/l	SW EQS	no
		TDS		45.5	mg/l	-	SW EQS	no
		TON		<0.5	mg/l	-	SW EQS	no
		Total.Coilforms		<1	SELECT	-	SW EQS	no
		Faecal.Coilforms		<1	SELECT	-	SW EQS	no
		SVOC		<10	ug/l	<10 ug/l	SW EQS	no
		VOC		<10	ug/l	<10 ug/l	SW EQS	no
		Selenium		<10	ug/l	-	SW EQS	no
		Pesticides		<10	ug/l	0.375 ug/l	SW EQS	no
					SELECT	-	SW EQS	no
17/2/2016	MW12 s	Alkalinity	Annual	22.61	mg/l	-	SW EQS	no
		Boron		0.02	mg/l	2.0 MG/L	SW EQS	no
		Cadnium		<20	ug/l	0.005 mg/l	SW EQS	no
		Chromium		<20	ug/l	0.03 mg/l	SW EQS	no
		calcium		8.81	mg/l	-	SW EQS	no
		copper		<20	ug/l	0.03 mg/l	SW EQS	no
		cyanide		0.001	ug/l	0.01 mg/l	SW EQS	no
		Iron		193	ug/l	1.0 mg/l	SW EQS	no
		Lead		<20	ug/l	0.01 mg/l	SW EQS	no
		Mercury		<20	ug/l	0.001 mg/l	SW EQS	no
		Manganese		<20	mg/l	0.3 mg/l	SW EQS	no
		magnesium		1.46	mg/l	-	SW EQS	no

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		Nickle			<20		ug/l	0.05 mg/l	SW EQS	no
		potassium			0.73		mg/l	5 mg/l	SW EQS	no
		sodium			10.5		mg/l	-	SW EQS	no
		Sulphates			4.43		mg/l	200 mg/l	SW EQS	no
		TDS			45		mg/l	-	SW EQS	no
		TON			<0.50		mg/l	-	SW EQS	no
		Total.Coilforms			<1		SELECT	-	SW EQS	no
		Faecal.Coilforms			<1		SELECT	-	SW EQS	no
		SVOC			<10		ug/l	<10 ug/l	SW EQS	no
		VOC			<10		ug/l	<10 ug/l	SW EQS	no
		Selenium			<10		ug/l	-	SW EQS	no
		Pesticides			<10		ug/l	0.375 ug/l	SW EQS	no
17/2/2016	MW12 D	Alkalinity		annual	27.39		mg/l	-	SW EQS	no
		Boron			0.01		mg/l	2.0 MG/L	SW EQS	no
		Cadnium			<20		ug/l	0.005 mg/l	SW EQS	no
		Chromium			<20		ug/l	0.03 mg/l	SW EQS	no
		calcium			0.62		mg/l	-	SW EQS	no
		copper			<20		ug/l	0.03 mg/l	SW EQS	no
		cyanide			0.002		ug/l	0.01 mg/l	SW EQS	no
		Iron			116		ug/l	1.0 mg/l	SW EQS	no
		Lead			<20		ug/l	0.01 mg/l	SW EQS	no
		Mercury			<20		ug/l	0.001 mg/l	SW EQS	no
		Manganese			48		mg/l	0.3 mg/l	SW EQS	no
		magnesium			1.83		mg/l	-	SW EQS	no
		Nickle			<20		ug/l	0.05 mg/l	SW EQS	no
		potassium			0.62		mg/l	5 mg/l	SW EQS	no
		sodium			10.9		mg/l	-	SW EQS	no
		Sulphates			3.6		mg/l	200 mg/l	SW EQS	no
		TDS			33.3		mg/l	-	SW EQS	no
		TON			0.55		mg/l	-	SW EQS	no
		Total.Coilforms			<1		SELECT	-	SW EQS	no
		Faecal.Coilforms			<1		SELECT	-	SW EQS	no
		SVOC			<10		ug/l	<10 ug/l	SW EQS	no
		VOC			<10		ug/l	<10 ug/l	SW EQS	no
		Selenium			<10		ug/l	-	SW EQS	no
		Pesticides			<10		ug/l	0.375 ug/l	SW EQS	no
17/2/2016	MW13 s	dry	dry	dry	dry	dry	dry	dry	dry	dry
17/2/2016	MW13 D	dry	dry	dry	dry	dry	dry	dry	dry	dry
17/2/2016	MW14 s	dry	dry	dry	dry	dry	dry	dry	dry	dry
17/2/2016	MW14 D	Alkalinity		annual	5.03		mg/l	-	SW EQS	no
		Boron			0.01		mg/l	2.0 MG/L	SW EQS	no
		Cadnium			<20		ug/l	0.005 mg/l	SW EQS	no
		Chromium			<20		ug/l	0.03 mg/l	SW EQS	no
		calcium			1.54		mg/l	-	SW EQS	no
		copper			<20		ug/l	0.03 mg/l	SW EQS	no
		cyanide			0.002		ug/l	0.01 mg/l	SW EQS	no
		Iron			98		ug/l	1.0 mg/l	SW EQS	no
		Lead			<20		ug/l	0.01 mg/l	SW EQS	no
		Mercury			<20		ug/l	0.001 mg/l	SW EQS	no
		Manganese			<20		mg/l	0.3 mg/l	SW EQS	no
		magnesium			1.8		mg/l	-	SW EQS	no

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		Nickle		<20		ug/l	0.05 mg/l	SW EQS	no
		potassium		0.84		mg/l	5 mg/l	SW EQS	no
		sodium		8.19		mg/l	-	SW EQS	no
		Sulphates		7.41		mg/l	200 mg/l	SW EQS	no
		TDS		29.5		mg/l	-	SW EQS	no
		TON		0.74		mg/l	-	SW EQS	no
		Total.Coilforms		<1		SELECT	-	SW EQS	no
		Faecal.Coilforms		<1		SELECT	-	SW EQS	no
		SVOC		<10		ug/l	<10 ug/l	SW EQS	no
		VOC		<10		ug/l	<10 ug/l	SW EQS	no
		Selenium		<10		ug/l	-	SW EQS	no
		Pesticides		<10		ug/l	0.375 ug/l	SW EQS	no
17/2/2016	MW15 S	Alkalinity	annual	21.8		mg/l	-	SW EQS	no
		Boron		<20		mg/l	2.0 MG/L	SW EQS	no
		Cadnium		<20		ug/l	0.005 mg/l	SW EQS	no
		Chromium		<20		ug/l	0.03 mg/l	SW EQS	no
		calcium		2.45		mg/l	-	SW EQS	no
		copper		<20		ug/l	0.03 mg/l	SW EQS	no
		cyanide		0.003		ug/l	0.01 mg/l	SW EQS	no
		Iron		96		ug/l	1.0 mg/l	SW EQS	no
		Lead		<20		ug/l	0.01 mg/l	SW EQS	no
		Mercury		<20		ug/l	0.001 mg/l	SW EQS	no
		Manganese		365		mg/l	0.3 mg/l	SW EQS	no
		magnesium		3.95		mg/l	-	SW EQS	no
		Nickle		<20		ug/l	0.05 mg/l	SW EQS	no
		potassium		0.72		mg/l	5 mg/l	SW EQS	no
		sodium		8.96		mg/l	-	SW EQS	no
		Sulphates		10.19		mg/l	200 mg/l	SW EQS	no
		TDS		29.7		mg/l	-	SW EQS	no
		TON		1.17		mg/l	-	SW EQS	no
		Total.Coilforms		<1		SELECT	-	SW EQS	no
		Faecal.Coilforms		<1		SELECT	-	SW EQS	no
		SVOC		<10		ug/l	<10 ug/l	SW EQS	no
		VOC		<10		ug/l	<10 ug/l	SW EQS	no
		Selenium		<10		ug/l	-	SW EQS	no
		Pesticides		<10		ug/l	0.375 ug/l	SW EQS	no
17/2/2016	MW15 D	Alkalinity	annual	38.1		mg/l	-	SW EQS	no
		Boron		0.01		mg/l	2.0 MG/L	SW EQS	no
		Cadnium		<20		ug/l	0.005 mg/l	SW EQS	no
		Chromium		<20		ug/l	0.03 mg/l	SW EQS	no
		calcium		4.54		mg/l	-	SW EQS	no
		copper		<20		ug/l	0.03 mg/l	SW EQS	no
		cyanide		<0.001		ug/l	0.01 mg/l	SW EQS	no
		Iron		637		ug/l	1.0 mg/l	SW EQS	no
		Lead		<20		ug/l	0.01 mg/l	SW EQS	no
		Mercury		<20		ug/l	0.001 mg/l	SW EQS	no
		Manganese		31		mg/l	0.3 mg/l	SW EQS	no
		magnesium		5.18		mg/l	-	SW EQS	no
		Nickle		<20		ug/l	0.05 mg/l	SW EQS	no
		potassium		1.68		mg/l	5 mg/l	SW EQS	no
		sodium		10.6		mg/l	-	SW EQS	no

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		Sulphates	2.57	mg/l	200 mg/l	SW EQS	no
		TDS	52	mg/l	-	SW EQS	no
		TON	<0.5	mg/l	-	SW EQS	no
		Total.Coilforms	<1	SELECT	-	SW EQS	no
		Faecal.Coliforms	<1	SELECT	-	SW EQS	no
		SVOC	<10	ug/l	<10 ug/l	SW EQS	no
		VOC	<10	ug/l	<10 ug/l	SW EQS	no
		Selenium	<10	ug/l	-	SW EQS	no
		Pesticides	<10	ug/l	0.375 ug/l	SW EQS	no
17/2/2016	MW16 S	Alkalinity	9.03	mg/l	-	SW EQS	no
		Boron	0.01	mg/l	2.0 MG/L	SW EQS	no
		Cadnium	<20	ug/l	0.005 mg/l	SW EQS	no
		Chromium	<20	ug/l	0.03 mg/l	SW EQS	no
		calcium	2.53	mg/l	-	SW EQS	no
		copper	<20	ug/l	0.03 mg/l	SW EQS	no
		cyanide	0.001	ug/l	0.01 mg/l	SW EQS	no
		Iron	5522	ug/l	1.0 mg/l	SW EQS	no
		Lead	<20	ug/l	0.01 mg/l	SW EQS	no
		Mercury	<20	ug/l	0.001 mg/l	SW EQS	no
		Manganese	189	mg/l	0.3 mg/l	SW EQS	no
		magnesium	2.06	mg/l	-	SW EQS	no
		Nickle	0.02	ug/l	0.05 mg/l	SW EQS	no
		potassium	0.52	mg/l	5 mg/l	SW EQS	no
		sodium	7.09	mg/l	-	SW EQS	no
		Sulphates	7.25	mg/l	200 mg/l	SW EQS	no
		TDS	31.3	mg/l	-	SW EQS	no
		TON	2.13	mg/l	-	SW EQS	no
		Total.Coilforms	<1	SELECT	-	SW EQS	no
		Faecal.Coliforms	<1	SELECT	-	SW EQS	no
		SVOC	<10	ug/l	<10 ug/l	SW EQS	no
		VOC	<10	ug/l	<10 ug/l	SW EQS	no
		Selenium	<10	ug/l	-	SW EQS	no
		Pesticides	<10	ug/l	0.375 ug/l	SW EQS	no
17/2/2016	MW16 D	Alkalinity	6.98	mg/l	-	SW EQS	no
		Boron	0.01	mg/l	2.0 MG/L	SW EQS	no
		Cadnium	<20	ug/l	0.005 mg/l	SW EQS	no
		Chromium	<20	ug/l	0.03 mg/l	SW EQS	no
		calcium	2.3	mg/l	-	SW EQS	no
		copper	<20	ug/l	0.03 mg/l	SW EQS	no
		cyanide	0.001	ug/l	0.01 mg/l	SW EQS	no
		Iron	4216	ug/l	1.0 mg/l	SW EQS	no
		Lead	<20	ug/l	0.01 mg/l	SW EQS	no
		Mercury	<20	ug/l	0.001 mg/l	SW EQS	no
		Manganese	383	mg/l	0.3 mg/l	SW EQS	no
		magnesium	1.67	mg/l	-	SW EQS	no
		Nickle	<20	ug/l	0.05 mg/l	SW EQS	no
		potassium	0.65	mg/l	5 mg/l	SW EQS	no
		sodium	7.65	mg/l	-	SW EQS	no
		Sulphates	13	mg/l	200 mg/l	SW EQS	no

Groundwater/Soil monitoring template				Lic No:	0	Year	2016		
		TDS		30		mg/l	-	SW EQS	no
		TON		<0.5		mg/l		SW EQS	no
		Total.Coilforms		<1		SELECT	-	SW EQS	no
		Faecal.Coilforms		<1		SELECT	-	SW EQS	no
		SVOC		<10		ug/l	<10 ug/l	SW EQS	no
		VOC		<10		ug/l	<10 ug/l	SW EQS	no
		Selenium		<10		ug/l		SW EQS	no
		Pesticides		<10		ug/l	0.375 ug/l	SW EQS	no
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)				<a href="#">Guidance on the Management of Contaminated Land and Groundwater at EPA Licensed Sites (EPA 2013).</a>					
**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)				<a href="#">Groundwater</a> <a href="#">Drinking water</a> <a href="#">Surface</a> <a href="#">regulations</a> <a href="#">(private supply)</a> <a href="#">Drinking water (public</a> <a href="#">water EQS</a> <a href="#">GTV's</a> <a href="#">standards</a> <a href="#">supply) standards</a>					

**Table 3: Soil results**

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

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

**Environmental Liabilities template**

Lic No:

0

Year

2016

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

		Commentary	
1	ELRA initial agreement status	SELECT	
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 template</b>	Lic No:	0	Year	2016
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	Highlighted cells contain dropdown menu click to view	Additional Information
1	Do you maintain an Environmental Mangement System (EMS) for the site. If yes, please detail in additional information	SELECT
2	Does the EMS reference the most significant environmental aspects and associated impacts on-site	SELECT
3	Does the EMS maintain an Environmental Management Programme (EMP) with the licence requirements	Suspended until landfill operational
4	Do you maintain an environmental documentation/communication system to monitor environmental performance of the facility, as required	

**Environmental Management Programme (EMP) report**

Objective Category	Target	Status (% completed)	How target was progressed	Responsibility	Intermediate outcomes
SELECT		SELECT		SELECT	SELECT
SELECT		SELECT		SELECT	SELECT
SELECT		SELECT		SELECT	SELECT



**Noise monitoring summary report**      Lic No: 0      Year 2016

- 1 Was noise monitoring a licence requirement for the AER period?  
If yes please fill in table N1 noise summary below SELECT
- 2 Was noise monitoring carried out using the EPA Guidance note, including completion of the "Checklist for noise measurement report" included in the guidance note as table 6? SELECT  
[Noise Guidance note NG4](#)
- 3 Does your site have a noise reduction plan SELECT
- 4 When was the noise reduction plan last updated? Enter date
- 5 Have there been changes relevant to site noise emissions (e.g. plant or operational changes) since the last noise survey? SELECT

**Table N1: Noise monitoring summary**

Date of monitoring	Time period	Noise location (on site)	Noise sensitive location -NSL (if applicable)	LA <sub>eq</sub>	LA <sub>90</sub>	LA <sub>10</sub>	LA <sub>max</sub>	Tonal or Impulsive noise* (Y/N)	If tonal /impulsive noise was identified was 5dB penalty applied?	Comments (ex. main noise sources on site, & extraneous noise ex. road traffic)	Is site compliant with noise limits (day/evening/night)?
								SELECT	SELECT		SELECT
Noise monitoring suspended until landfill operational											

\*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)

		Additional information
1	When did the site carry out the most recent energy efficiency audit? Please list the recommendations in table 3 below	Enter date of audit
	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	SELECT
2	Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional information	SELECT
3		

Energy Use	Previous year	Current year	year**	production*
Total Energy Used (MWHrs)				
Total Energy Generated (MWHrs)				
Total Renewable Energy Generated (MWHrs)				
Electricity Consumption (MWHrs)				
Fossil Fuels Consumption:				
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				

Suspended until landfill operational

\* 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

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*	Water Emissions	Water Consumption
					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
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

	Total	Landfill	Incineration	Recycled	Other
Hazardous (Tonnes)					
Non-Hazardous (Tonnes)					

**Resource Usage/Energy efficiency summary** Lic No: 0 Year 2016

Table R4: Energy Audit finding recommendations								
Date of audit	Recommendations	Description of Measures proposed	Origin of measures	Predicted energy savings %	Implementation date	Responsibility	Completion date	Status and comments
			SELECT					
			SELECT					
			SELECT					

Table R5: Power Generation: Where power is generated onsite (e.g. power generation facilities/food and drink industry)please complete the following information

	Unit ID	Unit ID	Unit ID	Unit ID	Station Total
Technology					
Primary Fuel					
Thermal Efficiency					
Unit Date of Commission					
Total Starts for year					
Total Running Time					
Total Electricity Generated (GWH)					
House Load (GWH)					
KWH per Litre of Process Water					
KWH per Litre of Total Water used on Site					





<b>WASTE SUMMARY</b>	Lic No: 0	Year 2016
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**Table 4 Environmental monitoring-landfill only** [Landfill Manual-Monitoring Standards](#)

Was meteorological monitoring in compliance with Landfill Directive (LD) standard in reporting year +	Was leachate monitored in compliance with LD standard in reporting year	Was Landfill Gas monitored in compliance with LD standard in reporting year	Was SW monitored in compliance with LD standard in reporting year	Have GW trigger levels been established	Were emission limit values agreed with the Agency (ELVs)	Was topography of the site surveyed in reporting year	Has the statement under S53(A)(5) of WMA been submitted in reporting year	Comments

+ please refer to Landfill Manual linked above for relevant Landfill Directive monitoring standards

**Table 5 Capping-Landfill only**

Area uncapped*	Area with temporary cap	Area with final cap to LD Standard m <sup>2</sup> ha, a	Area capped other	Area with waste that should be permanently capped to date under licence	What materials are used in the cap	Comments
SELECT UNIT	SELECT UNIT					

\*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?

SELECT

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

SELECT

Volume of leachate in reporting year(m <sup>3</sup> )	Leachate (BOD) mass load (kg/annum)	Leachate (COD) mass load (kg/annum)	Leachate (NH <sub>4</sub> ) mass load (kg/annum)	Leachate (Chloride) mass load kg/annum	Leachate treatment on-site	Specify type of leachate treatment	Comments

Please ensure that all information reported in the landfill gas section is consistent with the Landfill Gas Survey submitted in conjunction with PRTR returns

**Table 7 Landfill Gas-Landfill only**

Gas Captured&Treated by LFG System m <sup>3</sup>	Power generated (MW / KWh)	Used on-site or to national grid	Was surface emissions monitoring performed during the reporting year?	Comments
			SELECT	

Comments on liner type

