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guidance document link	cells that contain underlined text c
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Please note an interpretation of results is still required. This should be e
appropriately to fit your interpretation, if additional space is required plea
template should have all cells sized appropri

:ain a dropdown menu click to select one option from the list

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ol have an associated footnote or instructions

ıe top right corner contain a comment box with further instructions or clarification

ntered in the additional information/comments boxes within the templates. Please size these boxes
ıse 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	W0022-01
Name of site	East Cork Landfill
Site Location	Rossmore, Carrigtwohill, Co. Cork
NACE Code	3821
Class/Classes of Activity	5(c), 5(d), 50.1
National Grid Reference (6E, 6 N)	8.25588E 51.8851N

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.	East Cork Landfill has been closed since February 2007. Final Capping took place in 2008 and was completed in 2009. The environmental performance of the facility has continued to improve in comparison with previous years. No complaints were registered in 2016. The gas extraction system has continued to perform with the enclosed flare burning off the gas generated. Minor exceedences have again been measured in the perimeter gas wells but are explained by the estuarine conditions and limestone bedrock that account for naturally occuring CO2 and CH4. Both Leachate and groundwater results are similar to previous years. The noise survey was compliant for the year as would be expected with no large landfill compacting plant operating on the site. Overall the site has been compliant with its Licence.

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.

_____	_____29/03/2017_____
Signature	Date
experienced deputy)	

AIR-summary template	Lic No:	W0022-01	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	Yes	

Periodic/Non-Continuous Monitoring

2	Are there any results in breach of licence requirements? If yes please provide brief details in the comment section of TableA1 below		No	
3	Was all monitoring carried out in accordance with EPA guidance note AG2 and using the basic air monitoring checklist?	Basic air monitoring checklist	Yes	

AGN2

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

Emission reference no:	Parameter/ Substance	Frequency of Monitoring	ELV in licence or any revision therof	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence limit	Method of analysis	Annual mass load (kg)	Comments - reason for change in % mass load from previous year if applicable
Flare Stack	Methane (CH4)	Continuous	N/A	SELECT	692430	m3	yes	MAB		Annual mass load refers to difference
Flare Stack	Carbon dioxide (CO2)	Continuous	N/A	SELECT	415386	m3	yes	ISO 12039:2001		Annual mass load refers to difference
Flare Stack	Carbon monoxide (CO)	Continuous	<50mg/Nm3	No 30min mean can exceed the ELV	7.84	mg/Nm3	yes	ISO 12039:2001	19.86	
Flare Stack	Nitrogen oxides (NOx/NO2)	Annual	<150mg/Nm3	No 30min mean can exceed the ELV	111.06	mg/Nm3	yes	EN 14792:2005	281.36	
Flare Stack	Sulphur oxides (SOx/SO2)	Annual	N/A	SELECT	21.99	mg/Nm3	yes	EN 14792:2005	55.71	

AIR-summary template	Lic No:	W0022-01	Year	2016

Continuous Monitoring

4	Does your site carry out continuous air emissions monitoring?	Yes	

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

5	Did continuous monitoring equipment experience downtime? If yes please record downtime in table A2 below	Yes	
6	Do you have a proactive service agreement for each piece of continuous monitoring equipment?	Yes	
7	Did your site experience any abatement system bypasses? If yes please detail them in table A3 below	No	

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
Flare Stack	PRTR	N/A	12 month	100 % of values < ELV	m3			80		Have recorded the combined annual downtime of Flare at East Cork Landfill Landfill in this section. The emissions totals have been submitted in the above table.
	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

AIR-summary template	Lic No:	W0022-01	Year	2016

Solvent use and management on site

8	Do you have a total Emission Limit Value of direct and fugitive emissions on site? if yes please fill out tables A4 and A5	SELECT

Table A4: Solvent Management Plan Summary
Total VOC Emission limit value

Solvent regulations — Please refer to linked solvent regulations to complete table 5 and 6

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 A5: Solvent Mass Balance 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. by-	Solvents destroyed onsite through	Total emission of Solvent to air (kg)
							Total	

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER) Lic No: W0022-01 Year 2016

			Additional information
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** licenced emissions you only need to complete table W1 and or W2 for storm water analysis and visual inspections	No	
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	No	

Table W1 Storm water monitoring

Location reference	Location relative to site activities	PRTR Parameter	Licenced 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	upstream		pH	Quarterly	No ELV or trigger levels	N/A	8.0	pH units	yes	Median vaule for 2016
sw1	upstream		Temperature	Quarterly	No ELV or trigger levels	N/A	13.9	degrees C	yes	Median vaule for 2016
sw1	upstream		Conductivity	Quarterly	No ELV or trigger levels	N/A	36.6	µS/cm @20oC	yes	Median vaule for 2016
sw1	upstream		Dissolved Oxygen	Quarterly	No ELV or trigger levels	N/A	8.6	mg/L	yes	Median vaule for 2016

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)					Lic No:		W0022-01		Year	2016
sw1	upstream	Chlorides (as Cl)		Quarterly	No ELV or trigger levels	N/A	14221	mg/L	yes	Median vaule for 2016
sw1	upstream		BOD	Quarterly	No ELV or trigger levels	N/A	2.8	mg/L	yes	Median vaule for 2016
sw1	upstream		COD	Quarterly	No ELV or trigger levels	N/A	97.0	mg/L	yes	Median vaule for 2016
sw1	upstream		Ammonia (as N)	Quarterly	No ELV or trigger levels	N/A	0.8	mg/L	yes	Median vaule for 2016
sw1	upstream		Suspended Solids	Quarterly	No ELV or trigger levels	N/A	39.8	mg/L	yes	Median vaule for 2016
sw1	upstream	Chromium and compounds (as Cr)		Annual	No ELV or trigger levels	N/A	1.7	µg/L	yes	Annual value for 2016
sw1	upstream	Copper and compounds (as Cu)		Annual	No ELV or trigger levels	N/A	<1	µg/L	yes	Annual value for 2016
sw1	upstream	Cadmium and compounds (as Cd)		Annual	No ELV or trigger levels	N/A	<1	µg/L	yes	Annual value for 2016
	upstream		CALCIUM			N/A	441.0	mg/L	yes	Annual value for 2016
sw1	upstream		Iron	Annual	No ELV or trigger levels	N/A	156.0	µg/L	yes	Annual value for 2016
sw1	upstream	Lead and compounds (as Pb)		Annual	No ELV or trigger levels	N/A	1.6	mg/L	yes	Annual value for 2016
sw1	upstream		Magnesium	Annual	No ELV or trigger levels	N/A	1408.0	mg/L	yes	Annual value for 2016. Elevation due to geology
sw1	upstream		Manganese (as Mn)	Annual	No ELV or trigger levels	N/A	179.0	µg/L	yes	Annual value for 2016
sw1	upstream	Mercury and compounds (as Hg)		Annual	No ELV or trigger levels	N/A	<0.5	µg/L	yes	Annual value for 2016
sw1	upstream		Potassium	Annual	No ELV or trigger levels	N/A	487.0	mg/L	yes	Annual value for 2016
sw1	upstream		Sulphate	Annual	No ELV or trigger levels	N/A	2657.0	mg/L	yes	Annual value for 2016. Sample site at estuary
sw1	upstream		Total Oxidised Nitrogen (TON)	Annual	No ELV or trigger levels	N/A	0.8	mg/L	yes	Annual value for 2016
sw1	upstream	Zinc and compounds (as Zn)		Annual	No ELV or trigger levels	N/A	18.2	µg/L	yes	Annual value for 2016
sw1	upstream	Total phosphorus		Annual	No ELV or trigger levels	N/A	0.1	mg/L	yes	Annual value for 2016
sw2	upstream		pH	Quarterly	No ELV or trigger levels	N/A	8.1	pH units	yes	Median vaule for 2016
sw2	upstream		Temperature	Quarterly	No ELV or trigger levels	N/A	13.6	degrees C	yes	Median vaule for 2016
sw2	upstream		Conductivity	Quarterly	No ELV or trigger levels	N/A	41.0	µS/cm @20oC	yes	Median vaule for 2016
sw2	upstream		Dissolved Oxygen	Quarterly	No ELV or trigger levels	N/A	10.0	mg/L	yes	Median vaule for 2016
sw2	upstream	Chlorides (as Cl)		Quarterly	No ELV or trigger levels	N/A	16125	mg/L	yes	Median vaule for 2016
sw2	upstream		BOD	Quarterly	No ELV or trigger levels	N/A	2.3	mg/L	yes	Median vaule for 2016
sw2	upstream		COD	Quarterly	No ELV or trigger levels	N/A	87.3	mg/L	yes	Median vaule for 2016
sw2	upstream		Ammonia (as N)	Quarterly	No ELV or trigger levels	N/A	0.7	mg/L	yes	Median vaule for 2016
sw2	upstream		Suspended Solids	Quarterly	No ELV or trigger levels	N/A	31.8	mg/L	yes	Median vaule for 2016
sw2	upstream	Chromium and compounds (as Cr)		Annual	No ELV or trigger levels	N/A	2.8	µg/L	yes	Annual value for 2016
sw2	upstream	Copper and compounds (as Cu)		Annual	No ELV or trigger levels	N/A	1.3	µg/L	yes	Annual value for 2016
sw2	upstream	Cadmium and compounds (as Cd)		Annual	No ELV or trigger levels	N/A	<1	µg/L	yes	Annual value for 2016
sw2	upstream		CALCIUM			N/A	392.0	mg/L	yes	Annual value for 2016
sw2	upstream		Iron	Annual	No ELV or trigger levels	N/A	54.6	µg/L	yes	Annual value for 2016

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)					Lic No:		W0022-01		Year	2016
sw2	upstream	Lead and compounds (as Pb)		Annual	No ELV or trigger levels	N/A	<1	µg/L	yes	Annual value for 2016
sw2	upstream		Magnesium	Annual	No ELV or trigger levels	N/A	1260.0	mg/L	yes	Annual value for 2016. Elevation due to geology
sw2	upstream		Manganese (as Mn)	Annual	No ELV or trigger levels	N/A	62.9	µg/L	yes	Annual value for 2016
sw2	upstream	Mercury and compounds (as Hg)		Annual	No ELV or trigger levels	N/A	<0.5	mg/L	yes	Annual value for 2016
sw2	upstream		Potassium	Annual	No ELV or trigger levels	N/A	427.0	mg/L	yes	Annual value for 2016
sw2	upstream		Sulphate	Annual	No ELV or trigger levels	N/A	2710.0	mg/L	yes	Annual value for 2016
sw2	upstream		Total Oxidised Nitrogen (TON)	Annual	No ELV or trigger levels	N/A	1.9	mg/L	yes	Annual value for 2016
sw2	upstream	Zinc and compounds (as Zn)		Annual	No ELV or trigger levels	N/A	9.5	µg/L	yes	Annual value for 2016
sw2	upstream	Total phosphorus		Annual	No ELV or trigger levels	N/A	0.1	mg/L	yes	Annual value for 2016
sw3	downstream		pH	Quarterly	No ELV or trigger levels	N/A	8.0	pH units	yes	Median vaule for 2016
sw3	downstream		Temperature	Quarterly	No ELV or trigger levels	N/A	13.1	degrees C	yes	Median vaule for 2016
sw3	downstream		Conductivity	Quarterly	No ELV or trigger levels	N/A	37.0	µS/cm @20oC	yes	Median vaule for 2016
sw3	downstream		Dissolved Oxygen	Quarterly	No ELV or trigger levels	N/A	8.3	mg/L	yes	Median vaule for 2016
sw3	downstream	Chlorides (as Cl)		Quarterly	No ELV or trigger levels	N/A	14141.3	mg/L	yes	Median vaule for 2016
sw3	downstream		BOD	Quarterly	No ELV or trigger levels	N/A	1.8	mg/L	yes	Median vaule for 2016
sw3	downstream		COD	Quarterly	No ELV or trigger levels	N/A	90.0	mg/L	yes	Median vaule for 2016
sw3	downstream		Ammonia (as N)	Quarterly	No ELV or trigger levels	N/A	1.4	mg/L	yes	Median vaule for 2016
sw3	downstream		Suspended Solids	Quarterly	No ELV or trigger levels	N/A	19.0	mg/L	yes	Median vaule for 2016
sw3	downstream	Chromium and compounds (as Cr)		Annual	No ELV or trigger levels	N/A	7.4	µg/L	yes	Annual value for 2016
sw3	downstream	Copper and compounds (as Cu)		Annual	No ELV or trigger levels	N/A	,1	µg/L	yes	Annual value for 2016
sw3	downstream	Cadmium and compounds (as Cd)		Annual	No ELV or trigger levels	N/A	<1	µg/L	yes	Annual value for 2016
sw3	downstream		CALCIUM	Annual	No ELV or trigger levels	N/A	395.0	mg/L	yes	Annual value for 2016
sw3	downstream		Iron	Annual	No ELV or trigger levels	N/A	66.2	µg/L	yes	Annual value for 2016
sw3	downstream	Lead and compounds (as Pb)		Annual	No ELV or trigger levels	N/A	<1	µg/L	yes	Annual value for 2016
sw3	downstream		Magnesium	Annual	No ELV or trigger levels	N/A	1251.0	mg/L	yes	Annual value for 2016. Elevation due to geology of the site
sw3	downstream		Manganese (as Mn)	Annual	No ELV or trigger levels	N/A	38.5	µg/L	yes	Annual value for 2016
sw3	downstream	Mercury and compounds (as Hg)		Annual	No ELV or trigger levels	N/A	<0.5	mg/L	yes	Annual value for 2016
sw3	downstream		Potassium	Annual	No ELV or trigger levels	N/A	422.0	mg/L	yes	Annual value for 2016
sw3	downstream		Sulphate	Annual	No ELV or trigger levels	N/A	2415.0	mg/L	yes	Annual value for 2016. Site located in estuary
sw3	downstream		Total Oxidised Nitrogen (TON)	Annual	No ELV or trigger levels	N/A	0.4	mg/L	yes	Annual value for 2016
sw3	downstream	Zinc and compounds (as Zn)		Annual	No ELV or trigger levels	N/A	2.700	µg/L	yes	Annual value for 2016

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER) Lic No: W0022-01 Year 2016

sw3	downstream	Total phosphorus		Annual	No ELV or trigger levels	N/A	<0.04	mg/L	yes	Annual value for 2016
	SELECT	SELECT	SELECT			N/A		SELECT	SELECT	
	SELECT	SELECT	SELECT			N/A		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		SELECT	Additional information
4	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 box	External /Internal Lab Quality checklist / Assessment of results checklist	SELECT	

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

Emission reference no:	Emission released to	Parameter/ SubstanceNote 1	Type of sample	Frequency of monitoring	Averaging period	ELV or trigger values in licence or any revision therof Note 2	Licence Compliance criteria	Measured value	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?	SELECT	Additional Information

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

6	Did continuous monitoring equipment experience downtime? **If yes please record downtime in table W4 below**	SELECT	
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/Pipeline testing template Lic No: W0022-01 Year 2016

Bund testing

dropdown menu click to see options

		Additional information
1	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 including mobile bunds must be listed in the table below, please include all bunds outside the licenced testing period** (mobile bunds and chemstore included)	Yes	
2	Please provide integrity testing frequency period	3 years	
3	Does the site maintain a register of bunds, underground pipelines (including stormwater and foul), Tanks, sumps and containers? (containers refers to "Chemstore" type units and mobile bunds)	No	
4	How many bunds are on site?	3	
5	How many of these bunds have been tested within the required test schedule?	3	
6	How many mobile bunds are on site?	0	
7	Are the mobile bunds included in the bund test schedule?	No	
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?		
	Please list any sump integrity failures in table B1		
11	Do all sumps and chambers have high level liquid alarms?	N/A	
12	If yes to Q11 are these failsafe systems included in a maintenance and testing programme?	N/A	
13	Is the Fire Water Retention Pond included in your integrity test programme?	SELECT	

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)
Leachate Lagoon	reinforced concrete		leachate	1400	1000	Structural assessment		Nov-08	Yes	Pass		SELECT	2018	
Surfacewater Lagoon	reinforced concrete		surfacewater	10000	7500	Structural assessment		Nov-08	Yes	Pass			2018	
Surfacewater Lagoon	reinforced concrete		surfacewater	2500	2000	Structural assessment		Nov-08	Yes	Pass		SELECT	2018	

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

			Commentary
15	Has integrity testing been carried out in accordance with licence requirements and are all structures tested in line with BS8007/EPA Guidance?	bunding and storage guidelines	Yes	
16	Are channels/transfer systems to remote containment systems tested?		SELECT	
17	Are channels/transfer systems compliant in both integrity and available volume?		Yes	

Pipeline/underground structure testing

1	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 withing the integrity test period as specified**	SELECT	
2	Please provide integrity testing frequency period	SELECT	

*please note integrity testing means water tightness testing for process and foul pipelines (as required under your licence)

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

Groundwater/Soil monitoring template	Lic No:	W0022-01	Year	2016

			Comments	
1	Are you required to carry out groundwater monitoring as part of your licence requirements?	yes		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 interpretaion as an additional section in this AER
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. Groundwater monitoring template	no		
5	Is the contamination related to operations at the facility (either current and/or historic)	no		There are 5 ground water wells on site at East Cork Landfill. BH3 &BH4 are up gradient while BH1 & BH2 are down gradient . BH5 located on private property , was dry during 2016. During 2016, TOC and ammonia tigger limits fro BH1/BH2 &BH3 were not exceeded in 2016. Quarterly parameters such as conducivity, chlorides, sodium and potassium were exceeded frequently during 2016. These exceedences are attributed to the location of the site in realtion to the estuary and the effect of slaine water on the ground water wells. Overall, ground water results were similiar to previous year.
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 assesment 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?	N/A		

Table 1: Upgradient Groundwater monitoring results

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration++	Average Concentration+	unit	GTV's*	IGV	Upward trend in pollutant concentration over last 5 years of monitoring data
	BH4	pH	Meter	Quartely	7.2	7	unit		9.5	no
	BH4	Temp	Meter	Quartely					25	no
	BH4	Elec.Conductivity	Meter	Quartely	19.2	16.3		800-1875	1000	no
	BH4	Chlorides	titration	Quartely	7207	4170	uS/cm	24-187.5	250	no
	BH4	Ammoniacal Nitorgen	ISE	Quartely		1.0	mg/l	0.065-0.175	trigger limit none	no
	BH4	Iron	ICP	Quartely			mg/l		0.2	no
	BH4	TON	HACH	Quartely	14.7	8.1	ug/l	-	No abnormal change	no
	BH4	TOC	TOC analyser	Quartely	15.2	9.5	mg/l		trigger limit none	no
	BH4	Cadmium	ICP	Annual	<1	<1	mg/l	-	0.005	no
	BH4	Chromium (total)	ICP	Annual	3.7	3.7	ug/l	37.5	0.03	no
	BH4	Copper	COLORIMETRY	Annual	2	2	ug/l	1500	0.03	no
	BH4	Cyanide (Total)	ICP	Annual	<0.05	<0.05	ug/l	-	0.01	no
	BH4	Lead	ICP	Annual	<1	<1	ug/l	18.75	0.01	no
	BH4	Mangnesium	ICP	Annual	547	547	ug/l	-	50	no

Groundwater/Soil monitoring template				Lic No:	W0022-01			Year	2016	
	BH4	Manganese	ICP	Annual	0.89	0.89	mg/l	-	0.05	no
	BH4	Mercury	ICP	Annual	<0.5	<0.5	ug/l	0.75	0.001	no
	BH4	Nickle	ICP	Annual			ug/l	15	0.02	no
	BH4	Potassium	ICP	Annual	179	179	ug/l	-	5	no
	BH4	Sulphate	Aquakem auto analyser	Annual	840	840	mg/l	187.5	200	no
	BH4	Total Alkalinity	icp	Annual	260	260	mg/l	-		no
	BH4	Total Phosphorus	spectrophotometry apha	Annual	0.35	0.35	mg/l	0.09		no
	BH4	Phenols	GC-MS	Annual	<1	<1	mg/l		0.5	no
	BH4	Naphthalene	GC-MS	Annual	<0.01	<0.01	ug/l		2	no
	BH4	Acenaphthylene	GC-MS	Annual	0.01	0.01	ug/l			no
	BH4	Anthracene	GC-MS	Annual	0.01	0.01	ug/l			no
	BH4	Chrysene	GC-MS	Annual	0.01	0.01	ug/l			no
	BH4	Fluoranthene	GC-MS	Annual	0.02	0.02	ug/l			no
	BH4	Fluorene	GC-MS	Annual	0.02	0.02	ug/l		0.03	no
	BH4	Pyrene	GC-MS	Annual	0.01	0.01	ug/l		0.1	no
	BH4	Phenanthrene	GC-MS	Annual	0.04	0.04	ug/l			no
	BH4	Bromodichloromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Bromoform	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Chloroform	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Dibromochloromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Dibromochloromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Vinyl Chloride	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Chloromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Trichloroethene	GC-MS	Annual			ug/l			no
	BH4	Bromomethane	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Trichloromonofluoromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH4	11 Dichloroethene	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Chloromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH4	1,1-dichloroethane	GC-MS	Annual	<1	<1	ug/l			no
	BH4	11 Dichloropropene	GC-MS	Annual	<1	<1	ug/l			no
	BH4	1,2 dicloroethane	GC-MS	Annual	<1	<1	ug/l			no
	BH4	1,2-dichloropropane	GC-MS	Annual	<1	<1	ug/l			no
	BH4	1,1,1-trichloroethane	GC-MS	Annual	<1	<1	ug/l			no
	BH4	112 Trichloroethane	GC-MS	Annual	<1	<1	ug/l			no
	BH4	1,3-dichloropropane	GC-MS	Annual	<1	<1	ug/l			no
	BH4	2-Hexanone	GC-MS	Annual			ug/l			no

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	BH4	1,2-dibromoethane	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Chlorobenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH4	1,1,1,2-tetrachloroethane	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Ethylbenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Xylene P&M	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Styrene	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Isopropylbenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH4	1,1,2,2-tetrachloroethane	GC-MS	Annual	<1	<1	ug/l			no
	BH4	1,2,3-trichloropropane	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Propylbenzene	GC-MS	Annual			ug/l			no
	BH4	2-chlorotoluene	GC-MS	Annual	<1	<1	ug/l			no
	BH4	4-chlorotoluene	GC-MS	Annual	<1	<1	ug/l			no
	BH4	1,3,5-trimethylbenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Tert Butyl Benzene	GC-MS	Annual	<1	<1	ug/l			no
	BH4	1,2,4-trimethylbenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH4	sec-butylbenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Pentachlorophenol	GC-MS	Annual	<5	<5	ug/l			no
	BH4	Tetrachloroethene	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Hexachlorobenzene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH4	Hexachlorobutadiene	GC-MS	Annual	<5	<5	ug/l			no
	BH4	2,4,6-Trichlorophenol	GC-MS	Annual	<5	<5	ug/l			no
	BH4	2,4-Dichlorophenol	GC-MS	Annual	<5	<5	ug/l			no
	BH4	2,4-Dimethylphenol	GC-MS	Annual	<1	<1	ug/l		10	no
	BH4	2-Chlorophenol	GC-MS	Annual	<5	<5	ug/l		10	no
	BH4	1,2,4-	GC-MS	Annual	<1	<1	ug/l			no
	BH4	1,2-dichlorobenzene	GC-MS	Annual	<5	<5	ug/l			no
	BH4	1,3-dichlorobenzene	GC-MS	Annual	<5	<5	ug/l			no

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	BH4	1,4-dichlorobenzene	GC-MS	Annual	<5	<5	ug/l			no
	BH4	2,4,5-Trichlorophenol	GC-MS	Annual	<5	<5	ug/l			no
	BH4	2,4-Dinitrotoluene	GC-MS	Annual	<1	<1	ug/l			no
	BH4	2,6-Dinitrotoluene	GC-MS	Annual	<1	<1	ug/l			no
	BH4	2-Chloronaphthalene	GC-MS	Annual	<1	<1	ug/l			no
	BH4	2-Methylnaphthalene	GC-MS	Annual	<1	<1	ug/l			no
	BH4	2-Methylphenol	GC-MS	Annual	<1	<1	ug/l			no
	BH4	2-Nitrophenol	GC-MS	Annual	<1	<1	ug/l			no
	BH4	4-Bromophenyl Phenyl Ether	GC-MS	Annual	<1	<1	ug/l			no
	BH4	4-Chloro-3-methylphenol	GC-MS	Annual	<1	<1	ug/l			no
	BH4	4-Chlorophenyl phenyl ether	GC-MS	Annual	<1	<1	ug/l			no
	BH4	4-Nitrophenol	GC-MS	Annual			ug/l			no
	BH4	Acenaphthene	GC-MS	Annual	<0.01	<0.01	ug/l		30	no
	BH4	Benzo(a)anthracene	GC-MS	Annual	0.01	0.01	ug/l			no
	BH4	Benzo(a)pyrene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH4	Benzo(b)fluoranthene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH4	Benzo(g,h,i)perylene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH4	Benzyl Butyl Phthalate	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Bis(2-chloroethoxy)methane	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Bis(2-chloroethyl)ether	GC-MS	Annual	<1	<1	ug/l		500	no
	BH4	Bis(2-chloroisopropyl)ether	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Bis(2-ethylhexyl)phthalate	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Dibenz(a,h)anthracene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH4	Dibenzofuran	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Diethylphthalate	GC-MS	Annual	<1	<1	ug/l			no

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	BH4	di-n-Butylphthalate	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Di-n-octylphthalate	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Diphenylamine	GC-MS	Annual			ug/l			no
	BH4	Hexachloroethane	GC-MS	Annual	<5	<5	ug/l			no
	BH4	Indeno(1,2,3-c,d)pyrene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH4	Isophorone	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Nitrobenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH4	n-Nitrosodi-n-propylamine	GC-MS	Annual			ug/l			no
	BH4	Acetone	GC-MS	Annual			ug/l			no
	BH4	Dichloromethane	GC-MS	Annual	<50	<50	ug/l			no
	BH4	Tetrahydrofuran	GC-MS	Annual			ug/l		1	no
	BH4	Toluene	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Xylene -o	GC-MS	Annual	<1	<1	ug/l		10	no
	BH4	Dichlorodifluoromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Ethyl Chloride/Chloroethane	GC-MS	Annual			ug/l			no
	BH4	Ethyl Ether/Diethyl Ether	GC-MS	Annual			ug/l			no
	BH4	Iodomethane/Methyl Iodide	GC-MS	Annual			ug/l			no
	BH4	Carbon Disulphide	GC-MS	Annual			ug/l			no
	BH4	Allyl Chloride	GC-MS	Annual			ug/l			no
	BH4	Chlormethyl Cyanide/Chloroacetonitrile	GC-MS	Annual			ug/l			no
	BH4	Propanenitrile	GC-MS	Annual			ug/l			no
	BH4	Trans-1,2 Dichloroethene	GC-MS	Annual	<1	<1	ug/l			no
	BH4	MtBE	GC-MS	Annual			ug/l			no
	BH4	2,2-dichloropropane	GC-MS	Annual	<1	<1	ug/l			no
	BH4	cis-12 Dichloroethene	GC-MS	Annual	<1	<1	ug/l			no
	BH4	2-Butanone	GC-MS	Annual			ug/l			no
	BH4	Methyl Acrylate	GC-MS	Annual			ug/l			no
	BH4	Bromochloromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Methacrylonitrile	GC-MS	Annual			ug/l			no
	BH4	1-Chlorobutane	GC-MS	Annual			ug/l			no

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	BH4	Carbon Tetrachloride	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Dibromomethane	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Methyl Methacrylate	GC-MS	Annual			ug/l			no
	BH4	13 Dichloropropene,cis	GC-MS	Annual	<1	<1	ug/l			no
	BH4	MIBK/4 Methyl 2 Pentanone	GC-MS	Annual			ug/l			no
	BH4	13 Dichloropropene,trans	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Ethyl Methacrylate	GC-MS	Annual			ug/l			no
	BH4	Bromobenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH4	Trans 14 Dichloro 2 Butene, tran	GC-MS	Annual			ug/l			no
	BH4	P Isopropyltoluene	GC-MS	Annual	<1	<1	ug/l			no
	BH4	N Butyl Benzene	GC-MS	Annual			ug/l			no
	BH4	1,2-dibromo-3-chloropropane	GC-MS	Annual			ug/l			no
	BH4	1,2,3-trichlorobenzene	GC-MS	Annual			ug/l			no
	BH4	Mecoprop	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH4	Bentazone	GC-MS	Annual			ug/l			no
	BH4	Simazine		Annual	<0.01	<0.01	ug/l		IGV	no
	BH3	pH	Meter	Quartely	7.5	7.2	units		9.5	no
	BH3	Temp	Meter	Quartely					25	no
	BH3	Elec.Conductivity	Meter	Quartely	18.5	9.4	uS/cm	800-1875	1000	no
	BH3	Chlorides	titration	Quartely	2468	1652	mg/l	24-187.5	250	no
	BH3	Ammoniacal Nitorgen	ISE	Quartely	16.7	8.38	mg/l	0.065-0.175	trigger limit 150mg/l	no
	BH3	Iron	ICP	Quartely	36.3		ug/l		0.2	no
	BH3	TON	HACH	Quartely	13.1	3.7	mg/l	-	No abnormal change	no
	BH3	TOC	TOC analyser	Quartely	6.6	3.3	mg/l		trigger limit 40mg/l	no
	BH3	Cadmium	ICP	Annual	<1	<1	ug/l	-	0.005	no
	BH3	Chromium (total)	ICP	Annual	2.63	2.63	ug/l	37.5	0.03	no
	BH3	Copper	COLORIMETRY	Annual	<1	<1	ug/l	1500	0.03	no
	BH3	Cyanide (Total)	ICP	Annual	<0.05	<0.05	ug/l	-	0.01	no
	BH3	Lead	ICP	Annual	<1	<1	ug/l	18.75	0.01	no
	BH3	Mangnesium	ICP	Annual	157	157	mg/l	-	50	no
	BH3	Manganese	ICP	Annual	1.08	1.08	ug/l	-	0.05	no
	BH3	Mercury	ICP	Annual	<0.5	<0.5	ug/l	0.75	0.001	no
	BH3	Nickle	ICP	Annual			ug/l	15	0.02	no

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	BH3	Potassium	ICP	Annual	174	87.25	mg/l	-	5	no
	BH3	Sulphate	Aquakem auto analyser	Annual	81.5	81.5	mg/l	187.5	200	no
	BH3	Total Alkalinity	icp	Annual	264	264	mg/l	-		no
	BH3	Total Phosphorus	spectrophotometry apha	Annual	0.08	0.08	mg/l	0.09		no
	BH3	Phenols	GC-MS	Annual	4	4	ug/l		0.5	no
	BH3	Naphthalene	GC-MS	Annual	<0.01	<0.01	ug/l		2	no
	BH3	Acenaphthylene	GC-MS	Annual	0.01	0.01	ug/l			no
	BH3	Anthracene	GC-MS	Annual	0.01	0.01	ug/l			no
	BH3	Chrysene	GC-MS	Annual	0.04	0.04	ug/l			no
	BH3	Fluoranthene	GC-MS	Annual	0.06	0.06	ug/l			no
	BH3	Fluorene	GC-MS	Annual	0.01	0.01	ug/l		0.03	no
	BH3	Pyrene	GC-MS	Annual	0.05	0.05	ug/l		0.1	no
	BH3	Phenanthrene	GC-MS	Annual	0.07	0.07	ug/l			no
	BH3	Bromodichloromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Bromoform	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Chloroform	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Dibromochloromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Dibromochloromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Vinyl Chloride	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Chloromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Trichloroethene	GC-MS	Annual			ug/l			no
	BH3	Bromomethane	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Trichloromonofluoromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH3	11 Dichloroethene	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Chloromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH3	1,1-dichloroethane	GC-MS	Annual	<1	<1	ug/l			no
	BH3	11 Dichloropropene	GC-MS	Annual	<1	<1	ug/l			no
	BH3	1,2 dicloroethane	GC-MS	Annual	<1	<1	ug/l			no
	BH3	1,2-dichloropropane	GC-MS	Annual	<1	<1	ug/l			no
	BH3	1,1,1-trichloroethane	GC-MS	Annual	<1	<1	ug/l			no
	BH3	112 Trichloroethane	GC-MS	Annual	<1	<1	ug/l			no
	BH3	1,3-dichloropropane	GC-MS	Annual	<1	<1	ug/l			no
	BH3	2-Hexanone	GC-MS	Annual			ug/l			no
	BH3	1,2-dibromoethane	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Chlorobenzene	GC-MS	Annual	<1	<1	ug/l			no

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	BH3	1,1,1,2-tetrachloroethane	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Ethylbenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Xylene P&M	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Styrene	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Isopropylbenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH3	1,1,2,2-tetrachloroethane	GC-MS	Annual	<1	<1	ug/l			no
	BH3	1,2,3-trichloropropane	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Propylbenzene	GC-MS	Annual			ug/l			no
	BH3	2-chlorotoluene	GC-MS	Annual	<1	<1	ug/l			no
	BH3	4-chlorotoluene	GC-MS	Annual	<1	<1	ug/l			no
	BH3	1,3,5-trimethylbenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Tert Butyl Benzene	GC-MS	Annual	<1	<1	ug/l			no
	BH3	1,2,4-trimethylbenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH3	sec-butylbenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Pentachlorophenol	GC-MS	Annual	<5	<5	ug/l			no
	BH3	Tetrachloroethene	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Hexachlorobenzene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH3	Hexachlorobutadiene	GC-MS	Annual	<5	<5	ug/l			no
	BH3	2,4,6-Trichlorophenol	GC-MS	Annual	<5	<5	ug/l			no
	BH3	2,4-Dichlorophenol	GC-MS	Annual	<5	<5	ug/l			no
	BH3	2,4-Dimethylphenol	GC-MS	Annual	<1	<1	ug/l		10	no
	BH3	2-Chlorophenol	GC-MS	Annual	<5	<5	ug/l		10	no
	BH3	1,2,4-trichlorobenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH3	1,2-dichlorobenzene	GC-MS	Annual	<5	<5	ug/l			no
	BH3	1,3-dichlorobenzene	GC-MS	Annual	<5	<5	ug/l			no
	BH3	1,4-dichlorobenzene	GC-MS	Annual	<5	<5	ug/l			no

Groundwater/Soil monitoring template				Lic No:	W0022-01			Year	2016	
	BH3	2,4,5-Trichlorophenol	GC-MS	Annual	<5	<5	ug/l			no
	BH3	2,4-Dinitrotoluene	GC-MS	Annual	<1	<1	ug/l			no
	BH3	2,6-Dinitrotoluene	GC-MS	Annual	<1	<1	ug/l			no
	BH3	2-Chloronaphthalene	GC-MS	Annual	<1	<1	ug/l			no
	BH3	2-Methylnaphthalene	GC-MS	Annual	<1	<1	ug/l			no
	BH3	2-Methylphenol	GC-MS	Annual	<1	<1	ug/l			no
	BH3	2-Nitrophenol	GC-MS	Annual	<1	<1	ug/l			no
	BH3	4-Bromophenyl Phenyl Ether	GC-MS	Annual	<1	<1	ug/l			no
	BH3	4-Chloro-3-methylphenol	GC-MS	Annual	<1	<1	ug/l			no
	BH3	4-Chlorophenyl phenyl ether	GC-MS	Annual	<1	<1	ug/l			no
	BH3	4-Nitrophenol	GC-MS	Annual			ug/l			no
	BH3	Acenaphthene	GC-MS	Annual	0.01	0.01	ug/l		30	no
	BH3	Benzo(a)anthracene	GC-MS	Annual	0.03	0.03	ug/l			no
	BH3	Benzo(a)pyrene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH3	Benzo(b)fluoranthene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH3	Benzo(g,h,i)perylene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH3	Benzyl Butyl Phthalate	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Bis(2-chloroethoxy)methane	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Bis(2-chloroethyl)ether	GC-MS	Annual	<1	<1	ug/l		500	no
	BH3	Bis(2-chloroisopropyl)ether	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Bis(2-ethylhexyl)phthalate	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Dibenz(a,h)anthracene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH3	Dibenzofuran	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Diethylphthalate	GC-MS	Annual	<1	<1	ug/l			no
	BH3	di-n-Butylphthalate	GC-MS	Annual	<1	<1	ug/l			no

Groundwater/Soil monitoring template				Lic No:	W0022-01			Year	2016	
	BH3	Di-n-octylphthalate	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Diphenylamine	GC-MS	Annual			ug/l			no
	BH3	Hexachloroethane	GC-MS	Annual	<5	<5	ug/l			no
	BH3	Indeno(1,2,3-c,d)pyrene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH3	Isophorone	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Nitrobenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH3	n-Nitrosodi-n-propylamine	GC-MS	Annual			ug/l			no
	BH3	Acetone	GC-MS	Annual			ug/l			no
	BH3	Dichloromethane	GC-MS	Annual	<50	<50	ug/l			no
	BH3	Tetrahydrofuran	GC-MS	Annual			ug/l		1	no
	BH3	Toluene	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Xylene -o	GC-MS	Annual	<1	<1	ug/l		10	no
	BH3	Dichlorodifluoromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Ethyl Chloride/Chloroethane	GC-MS	Annual			ug/l			no
	BH3	Ethyl Ether/Diethyl Ether	GC-MS	Annual			ug/l			no
	BH3	Iodomethane/Methyl Iodide	GC-MS	Annual			ug/l			no
	BH3	Carbon Disulphide	GC-MS	Annual			ug/l			no
	BH3	Allyl Chloride	GC-MS	Annual			ug/l			no
	BH3	Chlormethyl Cyanide/Chloroacetonitrile	GC-MS	Annual			ug/l			no
	BH3	Propanenitrile	GC-MS	Annual			ug/l			no
	BH3	Trans-1,2 Dichloroethene	GC-MS	Annual	<1	<1	ug/l			no
	BH3	MtBE	GC-MS	Annual			ug/l			no
	BH3	2,2-dichloropropane	GC-MS	Annual	<1	<1	ug/l			no
	BH3	cis-12 Dichloroethene	GC-MS	Annual	<1	<1	ug/l			no
	BH3	2-Butanone	GC-MS	Annual			ug/l			no
	BH3	Methyl Acrylate	GC-MS	Annual			ug/l			no
	BH3	Bromochloromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Methacrylonitrile	GC-MS	Annual			ug/l			no
	BH3	1-Chlorobutane	GC-MS	Annual			ug/l			no
	BH3	Carbon Tetrachloride	GC-MS	Annual	<1	<1	ug/l			no

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	BH3	Dibromomethane	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Methyl Methacrylate	GC-MS	Annual			ug/l			no
	BH3	13 Dichloropropene,cis	GC-MS	Annual	<1	<1	ug/l			no
	BH3	MIBK/4 Methyl 2 Pentanone	GC-MS	Annual			ug/l			no
	BH3	13 Dichloropropene,trans	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Ethyl Methacrylate	GC-MS	Annual			ug/l			no
	BH3	Bromobenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH3	Trans 14 Dichloro 2 Butene, tran	GC-MS	Annual			ug/l			no
	BH3	P Isopropyltoluene	GC-MS	Annual	<1	<1	ug/l			no
	BH3	N Butyl Benzene	GC-MS	Annual			ug/l			no
	BH3	1,2-dibromo-3-chloropropane	GC-MS	Annual			ug/l			no
	BH3	1,2,3-trichlorobenzene	GC-MS	Annual			ug/l			no
	BH3	Mecoprop	GC-MS	Annual	0.5	0.5	ug/l			no
	BH3	Bentazone	GC-MS	Annual			ug/l			no
	BH3	Simazine		Annual	<0.01	<0.01	ug/l		IGV	no

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

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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
	BH1	pH	**Meter**	Quartely	7.2	7			9.5	
	BH1	Temp	Meter	Quartely					25	no
	BH1	Elec.Conductivity	Meter	Quartely	7.8	4.5	uS/cm	800-1875	1000	no
	BH1	Chlorides	titration	Quartely	2468	1331	mg/l	24-187.5	250	no
	BH1	Ammoniacal Nitorgen	ISE	Quartely	8.4	3.4	mg/l	0.065-0.175	trigger limit 50mg/l	no
	BH1	Iron	ICP	Quartely	5.44		ug/l		0.2	no
	BH1	TON	HACH	Quartely	2.3	1.3	mg/l	-	No abnormal change	no
	BH1	TOC	TOC analyser	Quartely	4.3	3.6	mg/l		trigger limit 40 mg/l	no
	BH1	Cadmium	ICP	Annual	<1	<1	ug/l	-	0.005	no
	BH1	Chromium (total)	ICP	Annual	1.32	1.32	ug/l	37.5	0.03	no
	BH1	Copper	COLORIMETRY	Annual	<1	<1	ug/l	1500	0.03	no
	BH1	Cyanide (Total)	ICP	Annual	<0.05	<0.05	ug/l	-	0.01	no
	BH1	Lead	ICP	Annual	<1	<1	ug/l	18.75	0.01	no
	BH1	Mangnesium	ICP	Annual	163	163	mg/l	-	50	no
	BH1	Manganese	ICP	Annual	8.35	8.35	ug/l	-	0.05	no
	BH1	Mercury	ICP	Annual	<0.5	<0.5	ug/l	0.75	0.001	no
	BH1	Nickle	ICP	Annual			ug/l	15	0.02	no
	BH1	Potassium	ICP	Annual	51.70	26.98	mg/l	-	5	no
	BH1	Sulphate	Aquakem auto analyser	Annual	300	300	mg/l	187.5	200	no
	BH1	Total Alkalinity	icp	Annual			mg/l	-		no
	BH1	Total Phosphorus	spectrophotometry apha	Annual	0.06	0.06	mg/l	0.09		no
	BH1	Phenols	GC-MS	Annual	<1	<1	ug/l		0.5	no
	BH1	Naphthalene	GC-MS	Annual	<0.01	<0.01	ug/l		2	no
	BH1	Acenaphthylene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH1	Anthracene	GC-MS	Annual	0.01	0.01	ug/l			no
	BH1	Chrysene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH1	Fluoranthene	GC-MS	Annual	0.01	0.01	ug/l			no
	BH1	Fluorene	GC-MS	Annual	<0.01	<0.01	ug/l		0.03	no
	BH1	Pyrene	GC-MS	Annual	0.01	0.01	ug/l		0.1	no
	BH1	Phenanthrene	GC-MS	Annual	0.01	0.01	ug/l			no
	BH1	Bromodichloromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Bromoform	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Chloroform	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Dibromochloromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Dibromochloromethane	GC-MS	Annual	<1	<1	ug/l			no

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	BH1	Vinyl Chloride	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Chloromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Trichloroethene	GC-MS	Annual			ug/l			no
	BH1	Bromomethane	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Trichloromonofluoromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH1	11 Dichloroethene	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Chloromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH1	1,1-dichloroethane	GC-MS	Annual	<1	<1	ug/l			no
	BH1	11 Dichloropropene	GC-MS	Annual	<1	<1	ug/l			no
	BH1	1,2 dicloroethane	GC-MS	Annual	<1	<1	ug/l			no
	BH1	1,2-dichloropropane	GC-MS	Annual	<1	<1	ug/l			no
	BH1	1,1,1-trichloroethane	GC-MS	Annual	<1	<1	ug/l			no
	BH1	112 Trichloroethane	GC-MS	Annual	<1	<1	ug/l			no
	BH1	1,3-dichloropropane	GC-MS	Annual	<1	<1	ug/l			no
	BH1	2-Hexanone	GC-MS	Annual			ug/l			no
	BH1	1,2-dibromoethane	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Chlorobenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH1	1,1,1,2-tetrachloroethane	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Ethylbenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Xylene P&M	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Styrene	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Isopropylbenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH1	1,1,2,2-tetrachloroethane	GC-MS	Annual	<1	<1	ug/l			no
	BH1	1,2,3-trichloropropane	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Propylbenzene	GC-MS	Annual			ug/l			no
	BH1	2-chlorotoluene	GC-MS	Annual	<1	<1	ug/l			no
	BH1	4-chlorotoluene	GC-MS	Annual	<1	<1	ug/l			no
	BH1	1,3,5-trimethylbenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Tert Butyl Benzene	GC-MS	Annual	<1	<1	ug/l			no
	BH1	1,2,4-trimethylbenzene	GC-MS	Annual	<1	<1	ug/l			no

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	BH1	sec-butylbenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Pentachlorophenol	GC-MS	Annual	<5	<5	ug/l			no
	BH1	Tetrachloroethene	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Hexachlorobenzene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH1	Hexachlorobutadiene	GC-MS	Annual	<5	<5	ug/l			no
	BH1	2,4,6-Trichlorophenol	GC-MS	Annual	<5	<5	ug/l			no
	BH1	2,4-Dichlorophenol	GC-MS	Annual	<5	<5	ug/l			no
	BH1	2,4-Dimethylphenol	GC-MS	Annual	<1	<1	ug/l		10	no
	BH1	2-Chlorophenol	GC-MS	Annual	<5	<5	ug/l		10	no
	BH1	1,2,4-trichlorobenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH1	1,2-dichlorobenzene	GC-MS	Annual	<5	<5	ug/l			no
	BH1	1,3-dichlorobenzene	GC-MS	Annual	<5	<5	ug/l			no
	BH1	1,4-dichlorobenzene	GC-MS	Annual	<5	<5	ug/l			no
	BH1	2,4,5-Trichlorophenol	GC-MS	Annual	<5	<5	ug/l			no
	BH1	2,4-Dinitrotoluene	GC-MS	Annual	<1	<1	ug/l			no
	BH1	2,6-Dinitrotoluene	GC-MS	Annual	<1	<1	ug/l			no
	BH1	2-Chloronaphthalene	GC-MS	Annual	<1	<1	ug/l			no
	BH1	2-Methylnaphthalene	GC-MS	Annual	<1	<1	ug/l			no
	BH1	2-Methylphenol	GC-MS	Annual	<1	<1	ug/l			no
	BH1	2-Nitrophenol	GC-MS	Annual	<1	<1	ug/l			no
	BH1	4-Bromophenyl Phenyl Ether	GC-MS	Annual	<1	<1	ug/l			no
	BH1	4-Chloro-3-methylphenol	GC-MS	Annual	<1	<1	ug/l			no
	BH1	4-Chlorophenyl phenyl ether	GC-MS	Annual	<1	<1	ug/l			no
	BH1	4-Nitrophenol	GC-MS	Annual			ug/l			no
	BH1	Acenaphthene	GC-MS	Annual	<0.01	<0.01	ug/l		30	no
	BH1	Benzo(a)anthracene	GC-MS	Annual	<0.01	<0.01	ug/l			no

Groundwater/Soil monitoring template				Lic No:	W0022-01			Year	2016	
	BH1	Benzo(a)pyrene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH1	Benzo(b)fluoranthene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH1	Benzo(g,h,i)perylene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH1	Benzyl Butyl Phthalate	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Bis(2-chloroethoxy)methane	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Bis(2-chloroethyl)ether	GC-MS	Annual	<1	<1	ug/l		500	no
	BH1	Bis(2-chloroisopropyl)ether	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Bis(2-ethylhexyl)phthalate	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Dibenz(a,h)anthracene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH1	Dibenzofuran	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Diethylphthalate	GC-MS	Annual	<1	<1	ug/l			no
	BH1	di-n-Butylphthalate	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Di-n-octylphthalate	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Diphenylamine	GC-MS	Annual			ug/l			no
	BH1	Hexachloroethane	GC-MS	Annual	<5	<5	ug/l			no
	BH1	Indeno(1,2,3-c,d)pyrene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH1	Isophorone	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Nitrobenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH1	n-Nitrosodi-n-propylamine	GC-MS	Annual			ug/l			no
	BH1	Acetone	GC-MS	Annual			ug/l			no
	BH1	Dichloromethane	GC-MS	Annual	<50	<50	ug/l			no
	BH1	Tetrahydrofuran	GC-MS	Annual			ug/l		1	no
	BH1	Toluene	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Xylene -o	GC-MS	Annual	<1	<1	ug/l		10	no
	BH1	Dichlorodifluoromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Ethyl Chloride/Chloroethane	GC-MS	Annual			ug/l			no
	BH1	Ethyl Ether/Diethyl Ether	GC-MS	Annual			ug/l			no

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	BH1	Iodomethane/Methyl Iodide	GC-MS	Annual			ug/l			no
	BH1	Carbon Disulphide	GC-MS	Annual			ug/l			no
	BH1	Allyl Chloride	GC-MS	Annual			ug/l			no
	BH1	Chlormethyl Cyanide/Chloroacetonitrile	GC-MS	Annual			ug/l			no
	BH1	Propanenitrile	GC-MS	Annual			ug/l			no
	BH1	Trans-1,2 Dichloroethene	GC-MS	Annual	<1	<1	ug/l			no
	BH1	MtBE	GC-MS	Annual			ug/l			no
	BH1	2,2-dichloropropane	GC-MS	Annual	<1	<1	ug/l			no
	BH1	cis-12 Dichloroethene	GC-MS	Annual	<1	<1	ug/l			no
	BH1	2-Butanone	GC-MS	Annual			ug/l			no
	BH1	Methyl Acrylate	GC-MS	Annual			ug/l			no
	BH1	Bromochloromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Methacrylonitrile	GC-MS	Annual			ug/l			no
	BH1	1-Chlorobutane	GC-MS	Annual			ug/l			no
	BH1	Carbon Tetrachloride	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Dibromomethane	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Methyl Methacrylate	GC-MS	Annual			ug/l			no
	BH1	13 Dichloropropene,cis	GC-MS	Annual	<1	<1	ug/l			no
	BH1	MIBK/4 Methyl 2 Pentanone	GC-MS	Annual			ug/l			no
	BH1	13 Dichloropropene,trans	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Ethyl Methacrylate	GC-MS	Annual			ug/l			no
	BH1	Bromobenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH1	Trans 14 Dichloro 2 Butene, tran	GC-MS	Annual			ug/l			no
	BH1	P Isopropyltoluene	GC-MS	Annual	<1	<1	ug/l			no
	BH1	N Butyl Benzene	GC-MS	Annual			ug/l			no
	BH1	1,2-dibromo-3-chloropropane	GC-MS	Annual			ug/l			no

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	BH1	1,2,3-trichlorobenzene	GC-MS	Annual			ug/l			no
	BH1	Mecoprop	GC-MS	Annual	<0.1	<0.1	ug/l			no
	BH1	Bentazone	GC-MS	Annual			ug/l			no
	BH1	Simazine		Annual	<0.01	<0.01	ug/l		IGV	no
	BH2	pH	Meter	Quartely	7	6.8	units		9.5	no
	BH2	Temp	Meter	Quartely			ug/l		25	no
	BH2	Elec.Conductivity	Meter	Quartely	12.7	5.9	ug/l	800-1875	1000	no
	BH2	Chlorides	titration	Quartely	4161	1748	ug/l	24-187.5	250	no
	BH2	Ammoniacal Nitorgen	ISE	Quartely	60.3	31.6	ug/l	0.065-0.175	trigger limit 100	no
	BH2	Iron	ICP	Quartely	0.08		ug/l		0.2	no
	BH2	TON	HACH	Quartely	10.1	7.3	ug/l	-	No abnormal change	no
	BH2	TOC	TOC analyser	Quartely	11.3	6.6	ug/l		trigger limit 40	no
	BH2	Cadmium	ICP	Annual	<1	<1	ug/l	-	0.005	no
	BH2	Chromium (total)	ICP	Annual	2.62	2.62	ug/l	37.5	0.03	no
	BH2	Copper	COLORIMETRY	Annual	49.2	49.2	ug/l	1500	0.03	no
	BH2	Cyanide (Total)	ICP	Annual	<0.05	<0.05	ug/l	-	0.01	no
	BH2	Lead	ICP	Annual	<1	<1	ug/l	18.75	0.01	no
	BH2	Mangnesium	ICP	Annual	127	127	ug/l	-	50	no
	BH2	Manganese	ICP	Annual	1.11	1.11	ug/l	-	0.05	no
	BH2	Mercury	ICP	Annual	<0.5	<0.5	ug/l	0.75	0.001	no
	BH2	Nickle	ICP	Annual			ug/l	15	0.02	no
	BH2	Potassium	ICP	Annual	120.0	59.8	ug/l	-	5	no
	BH2	Sulphate	Aquakem auto analyser	Annual	205	205	ug/l	187.5	200	no
	BH2	Total Alkalinity	icp	Annual			ug/l	-		no
	BH2	Total Phosphorus	spectrophotometry apha	Annual	<0.04	<0.04	ug/l	0.09		no
	BH2	Phenols	GC-MS	Annual	<1	<1	ug/l		0.5	no
	BH2	Naphthalene	GC-MS	Annual	<0.01	<0.01	ug/l		2	no
	BH2	Acenaphthylene	GC-MS	Annual	0.01	0.01	ug/l			no
	BH2	Anthracene	GC-MS	Annual	0.02	0.02	ug/l			no
	BH2	Chrysene	GC-MS	Annual	0.02	0.02	ug/l			no
	BH2	Fluoranthene	GC-MS	Annual	0.04	0.04	ug/l			no
	BH2	Fluorene	GC-MS	Annual	0.01	0.01	ug/l		0.03	no
	BH2	Pyrene	GC-MS	Annual	0.03	0.03	ug/l		0.1	no
	BH2	Phenanthrene	GC-MS	Annual	0.04	0.04	ug/l			no
	BH2	Bromodichloromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Bromoform	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Chloroform	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Dibromochloromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Dibromochloromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Vinyl Chloride	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Chloromethane	GC-MS	Annual	<1	<1	ug/l			no

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	BH2	Trichloroethene	GC-MS	Annual			ug/l			no
	BH2	Bromomethane	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Trichloromonofluoromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH2	11 Dichloroethene	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Chloromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH2	1,1-dichloroethane	GC-MS	Annual	<1	<1	ug/l			no
	BH2	11 Dichloropropene	GC-MS	Annual	<1	<1	ug/l			no
	BH2	1,2 dicloroethane	GC-MS	Annual	<1	<1	ug/l			no
	BH2	1,2-dichloropropane	GC-MS	Annual	<1	<1	ug/l			no
	BH2	1,1,1-trichloroethane	GC-MS	Annual	<1	<1	ug/l			no
	BH2	112 Trichloroethane	GC-MS	Annual	<1	<1	ug/l			no
	BH2	1,3-dichloropropane	GC-MS	Annual	<1	<1	ug/l			no
	BH2	2-Hexanone	GC-MS	Annual			ug/l			no
	BH2	1,2-dibromoethane	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Chlorobenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH2	1,1,1,2-tetrachloroethane	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Ethylbenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Xylene P&M	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Styrene	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Isopropylbenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH2	1,1,2,2-tetrachloroethane	GC-MS	Annual	<1	<1	ug/l			no
	BH2	1,2,3-trichloropropane	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Propylbenzene	GC-MS	Annual			ug/l			no
	BH2	2-chlorotoluene	GC-MS	Annual	<1	<1	ug/l			no
	BH2	4-chlorotoluene	GC-MS	Annual	<1	<1	ug/l			no
	BH2	1,3,5-trimethylbenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Tert Butyl Benzene	GC-MS	Annual	<1	<1	ug/l			no
	BH2	1,2,4-trimethylbenzene	GC-MS	Annual	<1	<1	ug/l			no

Groundwater/Soil monitoring template				Lic No:	W0022-01			Year	2016	
	BH2	sec-butylbenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Pentachlorophenol	GC-MS	Annual	<5	<5	ug/l			no
	BH2	Tetrachloroethene	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Hexachlorobenzene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH2	Hexachlorobutadiene	GC-MS	Annual	<5	<5	ug/l			no
	BH2	2,4,6-Trichlorophenol	GC-MS	Annual	<5	<5	ug/l			no
	BH2	2,4-Dichlorophenol	GC-MS	Annual	<5	<5	ug/l			no
	BH2	2,4-Dimethylphenol	GC-MS	Annual	<1	<1	ug/l		10	no
	BH2	2-Chlorophenol	GC-MS	Annual	<5	<5	ug/l		10	no
	BH2	1,2,4-trichlorobenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH2	1,2-dichlorobenzene	GC-MS	Annual	<5	<5	ug/l			no
	BH2	1,3-dichlorobenzene	GC-MS	Annual	<5	<5	ug/l			no
	BH2	1,4-dichlorobenzene	GC-MS	Annual	<5	<5	ug/l			no
	BH2	2,4,5-Trichlorophenol	GC-MS	Annual	<5	<5	ug/l			no
	BH2	2,4-Dinitrotoluene	GC-MS	Annual	<1	<1	ug/l			no
	BH2	2,6-Dinitrotoluene	GC-MS	Annual	<1	<1	ug/l			no
	BH2	2-Chloronaphthalene	GC-MS	Annual	<1	<1	ug/l			no
	BH2	2-Methylnaphthalene	GC-MS	Annual	<1	<1	ug/l			no
	BH2	2-Methylphenol	GC-MS	Annual	<1	<1	ug/l			no
	BH2	2-Nitrophenol	GC-MS	Annual	<1	<1	ug/l			no
	BH2	4-Bromophenyl Phenyl Ether	GC-MS	Annual	<1	<1	ug/l			no
	BH2	4-Chloro-3-methylphenol	GC-MS	Annual	<1	<1	ug/l			no
	BH2	4-Chlorophenyl phenyl ether	GC-MS	Annual	<1	<1	ug/l			no
	BH2	4-Nitrophenol	GC-MS	Annual			ug/l			no
	BH2	Acenaphthene	GC-MS	Annual	0.01	0.01	ug/l		30	no
	BH2	Benzo(a)anthracene	GC-MS	Annual	0.03	0.03	ug/l			no

Groundwater/Soil monitoring template				Lic No:	W0022-01			Year	2016	
	BH2	Benzo(a)pyrene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH2	Benzo(b)fluoranthene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH2	Benzo(g,h,i)perylene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH2	Benzyl Butyl Phthalate	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Bis(2-chloroethoxy)methane	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Bis(2-chloroethyl)ether	GC-MS	Annual	<1	<1	ug/l		500	no
	BH2	Bis(2-chloroisopropyl)ether	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Bis(2-ethylhexyl)phthalate	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Dibenz(a,h)anthracene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH2	Dibenzofuran	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Diethylphthalate	GC-MS	Annual	<1	<1	ug/l			no
	BH2	di-n-Butylphthalate	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Di-n-octylphthalate	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Diphenylamine	GC-MS	Annual			ug/l			no
	BH2	Hexachloroethane	GC-MS	Annual	<5	<5	ug/l			no
	BH2	Indeno(1,2,3-c,d)pyrene	GC-MS	Annual	<0.01	<0.01	ug/l			no
	BH2	Isophorone	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Nitrobenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH2	n-Nitrosodi-n-propylamine	GC-MS	Annual			ug/l			no
	BH2	Acetone	GC-MS	Annual			ug/l			no
	BH2	Dichloromethane	GC-MS	Annual	<50	<50	ug/l			no
	BH2	Tetrahydrofuran	GC-MS	Annual			ug/l		1	no
	BH2	Toluene	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Xylene -o	GC-MS	Annual	<1	<1	ug/l		10	no
	BH2	Dichlorodifluoromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Ethyl Chloride/Chloroethane	GC-MS	Annual			ug/l			no
	BH2	Ethyl Ether/Diethyl Ether	GC-MS	Annual			ug/l			no

Groundwater/Soil monitoring template					Lic No:	W0022-01			Year	2016
	BH2	Iodomethane/Methyl Iodide	GC-MS	Annual			ug/l			no
	BH2	Carbon Disulphide	GC-MS	Annual			ug/l			no
	BH2	Allyl Chloride	GC-MS	Annual			ug/l			no
	BH2	Chlormethyl Cyanide/Chloroacetonitrile	GC-MS	Annual			ug/l			no
	BH2	Propanenitrile	GC-MS	Annual			ug/l			no
	BH2	Trans-1,2 Dichloroethene	GC-MS	Annual	<1	<1	ug/l			no
	BH2	MtBE	GC-MS	Annual			ug/l			no
	BH2	2,2-dichloropropane	GC-MS	Annual	<1	<1	ug/l			no
	BH2	cis-12 Dichloroethene	GC-MS	Annual	<1	<1	ug/l			no
	BH2	2-Butanone	GC-MS	Annual			ug/l			no
	BH2	Methyl Acrylate	GC-MS	Annual			ug/l			no
	BH2	Bromochloromethane	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Methacrylonitrile	GC-MS	Annual			ug/l			no
	BH2	1-Chlorobutane	GC-MS	Annual			ug/l			no
	BH2	Carbon Tetrachloride	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Dibromomethane	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Methyl Methacrylate	GC-MS	Annual			ug/l			no
	BH2	13 Dichloropropene,cis	GC-MS	Annual	<1	<1	ug/l			no
	BH2	MIBK/4 Methyl 2 Pentanone	GC-MS	Annual			ug/l			no
	BH2	13 Dichloropropene,trans	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Ethyl Methacrylate	GC-MS	Annual			ug/l			no
	BH2	Bromobenzene	GC-MS	Annual	<1	<1	ug/l			no
	BH2	Trans 14 Dichloro 2 Butene, tran	GC-MS	Annual			ug/l			no
	BH2	P Isopropyltoluene	GC-MS	Annual	<1	<1	ug/l			no
	BH2	N Butyl Benzene	GC-MS	Annual			ug/l			no
	BH2	1,2-dibromo-3-chloropropane	GC-MS	Annual			ug/l			no

Groundwater/Soil monitoring template				Lic No:	W0022-01		Year	2016	
	BH2	1,2,3-trichlorobenzene	GC-MS	Annual			ug/l			no
	BH2	Mecoprop	GC-MS	Annual	3.1	3.1	ug/l			no
	BH2	Bentazone	GC-MS	Annual			ug/l			no
	BH2	Simazine		Annual	<0.01	<0.01	ug/l		IGV	no

*please note exceedance of generic assessment criteria (GAC) such as a Groundwater Threshold Value (GTV) or an Interim Guideline Value (IGV) or an upward trend in results for a substance indicates that further interpretation of monitoring results is required. In addition to completing the above table, please complete the Groundwater Monitoring Guideline Template Report at the link provided and submit separately through ALDER as a licensee return or as otherwise instructed by the EPA.

Groundwater monitoring template

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

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

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

Surface water EQS | Groundwater regulations GTV's | Drinking water (private supply) standards | Drinking water (public supply) standards | Interim Guideline Values (IGV)

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:	W0022-01	Year	2016

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

			Commentary
1	ELRA initial agreement status	Submitted and not agreed by EPA;	Closed February 2007
2	ELRA review status	SELECT	
3	Amount of Financial Provision cover required as determined by the latest ELRA	Specify	Authority Responsibility as
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	

Environmental Management Programme/Continuous Improvement Programme template		Lic No:	W0022-01	Year	2016
Highlighted cells contain dropdown menu click to view			Additional Information		
1	Do you maintain an Environmental Mangement System (EMS) for the site. If yes, please detail in additional information	Yes	2008. It includes sections on use of manual, site location and description, types of waste accepted and procedures,		
2	Does the EMS reference the most significant environmental aspects and associated impacts on-site	Yes			
3	Does the EMS maintain an Environmental Management Programme (EMP) as required in accordance with the licence requirements	Yes			
4	Do you maintain an environmental documentation/communication system to inform the public on environmental performance of the facility, as required by the licence	Yes			

Environmental Management Programme (EMP) report

Objective Category	Target	Status (% completed)	How target was progressed	Responsibility	Intermediate outcomes
Reduction of emissions to Air	Maintain low complaint numbers against the facility	100	Improvement of gas extraction system and operation	Site Staff & Management	Reduced emissions
Gas extraction system	Improved gas intake to flare unit and more efficient burning of gas	75	Improvement of site practice to ensure increased gas capture	Site Staff & Contractor	Increased compliance with licence conditions. Better quality gas arising at Flare unit
Materials Handling/Storage/Bunding	Improve annual recycling rate by 5%	60	Improvement of Civic Amenity Site layout and improved maintenance of existing infrastructure	Site Staff & Management	Installation of infrastructure and improved housekeeping
Additional improvements	Improve Site security	90	Liasing with Security Company and An Gardaí Síochana to deter would-be intruders. Infrastructure positioned to deter would-be intruders	Site Staff & Management	Improved Environmental Management Practices & cleaner site
Additional improvements	To control environmental nuisances at the facilty	80	Reduction of waste intake, improved litter capture and improved site practices	Site Staff	Increased compliance with licence conditions
Additional improvements	Review the closure modifications of the Waste Licence following the closure of landfill in Feb 2007	70	Testing regime inspected to make workload more efficient for site staff	Site management	Increased compliance with licence conditions

Noise monitoring summary report	Lic No:	W0022-01	Year	2016

1	Was noise monitoring a licence requirement for the AER period? If yes please fill in table N1 noise summary below	Yes
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? (Noise Guidance note NG4)	Yes
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?	No

Table N1: Noise monitoring summary

Date of monitoring	Time period	Noise location (on site)	Noise sensitive location -NSL (if applicable)	LA_{eq}	LA_{90}	LA_{10}	LA_{max}	Tonal or Impulsive noise* (Y/N)	If tonal /impulsive noise was 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)?
25/1/2017	30min	N1		53.1	42.7	55.6	71.8	No	No	No noise from landfill site. External noise from road, nature and adjacent quarry	Yes
25/1/2017	30min	N3		51.2	45.3	54.4	81.7	No	No	No noise from landfill site. External noise from road, nature and adjacent quarry	Yes
25/1/2017	30min	N4		59.3	46.2	62.1	81.7	No	No	No noise from landfill site. Noise from large rubbish truck emptying bins and cars stopping at the kiosk attributed to the noise levels recorded.External noise from road, nature and adjacent quarry.	Yes

*Please ensure that a tonal analysis has been carried out as per guidance note NG4. These records must be maintained onsite for future inspection

If noise limits exceeded as a result of noise attributed to site activities, please choose the corrective action from the following options? SELECT

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

Any additional comments? (less than 200 words)

Resource Usage/Energy efficiency summary

Lic No: W0022-01 Year 2016

			Additional information
1	When did the site carry out the most recent energy efficiency audit? Please list the recommendations in table 3 below	2015	
2	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	No	SEAI - Large Industry Energy Network (LIEN)
3	Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional information	SELECT	

Table R1 Energy usage on site

Energy Use	Previous year	Current year	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*
Total Energy Used (MWHrs)	66.988	61.508	-8%	
Total Energy Generated (MWHrs)				
Total Renewable Energy Generated (MWHrs)				
Electricity Consumption (MWHrs)	66.988	61.508	-8%	
Fossil Fuels Consumption:				
Heavy Fuel Oil (m3)	0.9	1	10%	
Light Fuel Oil (m3)	98	100	2%	
Natural gas (m3)				
Coal/Solid fuel (metric tonnes)				
Peat (metric tonnes)				
Renewable Biomass				
Renewable energy generated on site				

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

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

Table R2 Water usage on site

					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^3yr):	Volume used i.e not discharged to environment e.g. released as steam m3/yr	Unaccounted for Water:
Groundwater							
Surface water							
Public supply	178	198	11%	Non applicable	198	0	
Recycled water							
Total							

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

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

Table R3 Waste Stream Summary

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

Resource Usage/Energy efficiency summary Lic No: W0022-01 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
Jun-15	Replacement of lighting	Replace units when fa	energy audit	10%	Jan-16	Site management	Ongoing	Energy Audit find
			SELECT					
			SELECT					

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

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

Complaints and Incidents summary template

Lic No: W0022-01 Year 2016

Complaints

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	Additional information

Table 1 Complaints summary

Date	Category	Other type (please specify)	Brief description of complaint (Free txt <20 words)	Corrective action< 20 words	Resolution status	Resolution date	Further information
	SELECT				SELECT		
	SELECT				SELECT		
	SELECT				SELECT		
	SELECT				SELECT		
	SELECT				SELECT		

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

Incidents

Have any incidents occurred on site in the current reporting year? Please list all incidents for current reporting year in Table 2 below	SELECT	Additional information

*For information on how to report and what constitutes an incident	What is an incident

Table 2 Incidents summary

Date of occurrence	Incident nature	Location of occurrence	Incident category*please refer to guidance	Receptor	Cause of incident	Other cause(please specify)	Activity in progress at time of incident	Communication	Occurrence	Corrective action<20 words	Preventative action <20 words	Resolution status	Resolution date	Likelihood of 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: W0022-01 Year 2016

SECTION A-PRTR ON SITE WASTE TREATMENT AND WASTE TRANSFERS TAB- TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES PRTR facility logon dropdown list click to see options

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO AIR					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Descriptio	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
01	Methane (CH4)	C	OTH	Measured through analysis of flare flue gas emissions monitoring	0.0	388400.76	0.0	388400.76
02	Carbon monoxide (CO)	M	ISO 12039:2001	Measured through analysis of flare flue gas emissions monitoring	0.0	19.86	0.0	19.86
03	Carbon dioxide (CO2)	C	ISO 12039:2001	Measured through analysis of flare flue gas emissions monitoring	0.0	1591923.27	0.0	1591923.27
07	Non-methane volatile organic compounds	M	EN 13649:2001	Measured through analysis of flare flue gas emissions monitoring	0.0	18.72	0.0	18.72
08	Nitrogen oxides (NOx/NO2)	M	EN 14792:2005	Measured through analysis of flare flue gas emissions monitoring	0.0	281.35	0.0	281.35
11	**Sulphur oxides (SOx/SO2)**	M	EN 14791:2005	Measured through analysis of flare flue gas emissions monitoring	0.0	55.71	0.0	55.71

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

SECTION B : REMAINING PRTR POLLUTANTS

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

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

Additional Data Requested from Landfill operators

operators are requested to provide summary data on landfill gas (Methane)

Landfill: East Cork Landfill Site

Please enter summary data on the quantities of methane flared and / or utilised	T (Total) kg/Year	M/C/E	Method Used: Method Code	Method Used: Designation or Description	Facility Total Capacity m3 per hour	
Total estimated methane generation (as per site model)	861343.76				N/A	
Methane flared	472943.0				0.0	(Total Flaring Capacity)
Methane utilised in engine/s	0.0				0.0	(Total Utilising Capacity)
Net methane emission (as reported in Section A above)	388400.76				N/A	

WASTE SUMMARY	Lic No:	W0022-01	Year	2016

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

Please enter all quantities on this sheet in Tonnes

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Address of Next Destination Facility Non Haz Waste: Address	Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS	Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	13 02 08	Yes	6.62	other engine, gear and lubricating oils	R9	M	Weighed	Offsite in Ireland	Enva Ltd,W184-01	Clonminam Industrial Estate,.'',Portlaoise,Co Laois,Ireland	Enva Ltd,W184-01	Clonminam Industrial Estate,".",Portlaoise,Co Laois,Ireland
Within the Country	15 01 01	No	62.16	paper and cardboard packaging	R3	M	Weighed	Offsite in Ireland	greenstar Ltd,W136-02	Corbally North,Srasfields Court,Glanmire, Co Cork,Ireland		
Within the Country	15 01 02	No	16.97	plastic packaging	R5	M	Weighed	Offsite in Ireland	Green Dragon Recycling Ltd,CK/09/0629/01	Corbally North,Sarsfields Court,Glanmire, Co Cork,Ireland		
Within the Country	15 01 04	No	1.56	metallic packaging	R4	M	Weighed	Offsite in Ireland	Green Dragon Recycling Ltd,CK/09/0629/01	Corbally North,Sarsfields Court,Glanmire, Co Cork,Ireland		
Within the Country	15 01 07	No	19.88	glass packaging	R5	M	Weighed	Offsite in Ireland	Mr Binman,W0061-01	Luddenmore,Grange,Kilmallock,Co Limerick,Ireland		
Within the Country	16 06 01	Yes	2.6	lead batteries	R6	M	Weighed	Offsite in Ireland	KMK Metals Ltd,W0133-03	Cappincur Industrail Estate,Daingean Rd,Tullamore,Co Offaly,Ireland	KMK Metals Ltd,W0133-03	Cappincur Industrail Estate,Daingean Rd,Tullamore,Co Offaly,Ireland
Within the Country	16 06 04	No	0.0	alkaline batteries (except 16 06 03)	R13	M	Weighed	Offsite in Ireland	KMK Metals Ltd,W0133-03	Cappincur Industrail Estate,Daingean Rd,Tullamore,Co Offaly,Ireland		
Within the Country	17 01 07	No	403.53	mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	R5	M	Weighed	Offsite in Ireland	Ballineen Skip Hire,WCP-CK-09-0608-04	Connagh,Ballineen ,Co Cork,.,Ireland		
Within the Country	19 07 03	No	8146.49	landfill leachate other than those mentioned in 19 07 02	D8	M	Weighed	Offsite in Ireland	Carrigtwohill Wastewater Treatment Plant,D0044-01	Wastewater Treatment Plant,Tullagreen, Carrigtwohill Wastewater Treatment		
Within the Country	20 01 01	No	50.71	paper and cardboard	R3	M	Weighed	Offsite in Ireland	greenstar Ltd,W136-02	Corbally North,Srasfields Court,Glanmire, Co Cork,Ireland		
Within the Country	20 01 02	No	7.42	glass	R5	M	Weighed	Offsite in Ireland	MSM Recycling Ltd,W0079-01	41-42 Cookstown Industrial Estate,Tallaght,Dublin,D24,Ireland		

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Within the Country	20 01 11	No	2.5	textiles	R5	M	Weighed	Offsite in Ireland	Textile Recycling Ltd,WCP-DC-08-1225-01	Glen Abbey Business Park,Tallaght,Dublin,D24,Ireland			
Within the Country	20 01 23	Yes	0.47	discarded equipment containing chlorofluorocarbons	R4	M	Weighed	Offsite in Ireland	KMK Metals Ltd,W0133-03	Cappincur Industrail Estate,Daingean Rd,Tullamore,Co Offaly,Ireland	KMK Metals Ltd,W0133-03	Cappincur Industrail Estate,Daingean Rd,Tullamore,Co Offaly,Ireland	
Within the Country	20 01 28	No	15.34	paint, inks, adhesives and resins other than those mentioned in 20 01 27	R1	M	Weighed	Offsite in Ireland	Enva Ltd,W184-01	Clonminam Industrial Estate,".",Portlaoise,Co Laois,Ireland			
Within the Country	20 01 35	Yes	168.74	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and and 20 01 23 containing hazardous	R4	M	Weighed	Offsite in Ireland	KMK Metals Ltd,W0133-03	Cappincur Industrail Estate,Daingean Rd,Tullamore,Co Offaly,Ireland	KMK Metals Ltd,W0133-03	Cappincur Industrail Estate,Daingean Rd,Tullamore,Co Offaly,Ireland	
Within the Country	20 01 36	No	0.0	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	R4	M	Weighed	Offsite in Ireland	KMK Metals Ltd,W0133-03	Cappincur Industrail Estate,Daingean Rd,Tullamore,Co Offaly,Ireland			
Within the Country	20 01 36	No	0.0	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	R4	M	Weighed	Offsite in Ireland	KMK Metals Ltd,W0133-03	Cappincur Industrail Estate,Daingean Rd,Tullamore,Co Offaly,Ireland			
Within the Country	20 01 38	No	353.94	wood other than that mentioned in 20 01 37	R13	M	Weighed	Offsite in Ireland	CTO Environmental Solutions Ltd,CK/09/0018/02	Tait's Farm,Rostellan, Midleton,Co Cork,Ireland			
Within the Country	20 01 40	No	190.76	metals	R4	M	Weighed	Offsite in Ireland	Pouladuff Dismantlers Ltd,CK/0584/01	Pouladuff Rd,Togher,Cork, Cork,Ireland			
Within the Country	20 02 01	No	308.02	biodegradable waste	R3	M	Weighed	Offsite in Ireland	greenstar Ltd,W136-02	Corbally North,Srasfields Court,Glanmire, Co Cork,Ireland			
Within the Country	20 03 01	No	484.75	mixed municipal waste	D13	M	Weighed	Offsite in Ireland	greenstar Ltd,W136-02	Corbally North,Srasfields Court,Glanmire, Co Cork,Ireland			
Within the Country	20 03 07	No	944.38	bulky waste	D13	M	Weighed	Offsite in Ireland	greenstar Ltd,W136-02	Corbally North,Srasfields Court,Glanmire, Co Cork,Ireland			
Within the Country	20 03 03	No	148.21	street-cleaning residues	D13	M	Weighed	Offsite in Ireland	greenstar Ltd,W136-02	Corbally North,Srasfields Court,Glanmire, Co Cork,Ireland			

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SECTION B- WASTE ACCEPTED ONTO SITE-TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES

			Additional Information
1	Were any wastes accepted onto your site for recovery or disposal or treatment prior to recovery or disposal within the boundaries of your facility ?; (waste generated within your boundaries is to be captured through PRTR reporting) If yes please enter details in table 1 below	N/A	
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	N/A	
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	N/A	

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)	EWC code European Waste Catalogue EWC codes	Source of waste accepted	Description of waste accepted **Please enter an accurate and detailed description - which applies to relevant EWC code** European Waste Catalogue EWC codes	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	SELECT	
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	SELECT	
6	Does your facility have relevant nuisance controls in place?	SELECT	
7	Do you have an odour management system in place for your facility? If no why?	SELECT	
8	Do you maintain a sludge register on site?	SELECT	

SECTION D-TO BE COMPLETED BY LANDFILL SITES ONLY

Table 2 Waste type and tonnage-landfill only

Waste types permitted for disposal	Authorised/licenced annual intake for disposal (tpa)	Actual intake for disposal in reporting year (tpa)	Remaining licensed capacity at end of reporting year (m3)	Comments
68,200	0	0		
21,400	0		Site closed Feb 2007	
13,800	0			
7,800	0			

Table 3 General information-Landfill only

Area ID	Date landfilling commenced	Date landfilling ceased	Currently landfilling	Private or Public Operated	Inert or non-hazardous	Predicted date to cease landfilling	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
										SELECT UNIT	SELECT UNIT	SELECT UNIT
Site Closed Feb 2007												

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Table 4 Environmental monitoring-landfill only

Landfill Manual-Monitoring Standards

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
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	All license conditions being met under current monitoring regime

.+ 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 m2 ha, a	Area capped other	Area with waste that should be permanently capped to date under licence	What materials are used in the cap	Comments
SELECT UNIT	SELECT UNIT					
0	0	65760m2	0	65760m2	1mm HDPE welded liner, geotextile drainage layer and protection barrier covered with 1m of suitable, screened soil.	

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

Volume of leachate in reporting year(m3)	Leachate (BOD) mass load (kg/annum)	Leachate (COD) mass load (kg/annum)	Leachate (NH4) mass load (kg/annum)	Leachate (Chloride) mass load kg/annum	Leachate treatment on-site	Specify type of leachate treatment	Comments
8146.49	461.6	2351.6	3520.2	11874.9	No	Wastewater Treatment Plant with Mixing tank, Oxidation ditch & Settlement tanks	

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 m3	Power generated (MW / KWh)	Used on-site or to national grid	Was surface emissions monitoring performed during the reporting year?	Comments
692430	0	0	Yes	Gas captured figure is Annual Methane burn-off in kg/annum. Areas of elevated VOC's are identified by the surveys and are attended to by site staff.

Comments on liner type