

Facility Information Summary	
AER Reporting Year	2017
Licence Register Number	W0289-01
Name of site	The East Tip
Site Location	Haulbowline Island, Co Cork
NACE Code	3900
Class/Classes of Activity	D1,D4,D7,D13,D15, R4, R5, R12, R13
National Grid Reference (6E, 6 N)	E79532, N65455
<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 and an overview of compliance with your licence <u>listing all exceedances of licence limits (where applicable) and what they relate to e.g. air, water, noise.</u></p>	<p>The Waste Licence covers the proposed remediation of the East Tip site through the following activities:</p> <ol style="list-style-type: none"> 1. Constructing an engineered capping system over the surface of the waste body and installing a surface water drainage system to limit surface water infiltration. 2. Constructing a Perimeter Engineered Structure (PES) to limit tidal inundation to the site. 3. Re-profiling and landscaping the site to facilitate the provision of a public park (including grassland, wetland, paths, playing pitch, car park for 54 no. cars, bicycle parking area, future overflow parking area, entrance feature, boundary and other fencing, bird viewing areas, bird roosting ledge, and all associated landscaping works). <p>Notification of the commencement of licenced activities was provide to the EPA on 7th of September. Licenced activities commenced in December 2017 with the set up of the slag waste processing equipment on site and initial slag waste processing trials taking place in mid-December.</p> <p>As such, there is no monitoring data, complaints, incidents, liability assessment, etc. carried out in 2017 and these elements of this AER contain no data. The 2018 AER will contain the relevant information on the licenced activity.</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 Group/Facility manager (or nominated, suitably qualified and experienced deputy)	_____ Date
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AIR-summary template Lic No: W0289-01 Year 2017

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** licensed emissions and **do not complete a solvent management plan** (table A4 and A5) you do not need to complete the tables

Yes	
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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	
Yes	Lab results awaited for Bergerhoff Dust Deposition and Metals results for December 2017.

3

Was all monitoring carried out in accordance with EPA guidance note AG2 and using the basic air monitoring checklist? [Basic air monitoring checklist](#) [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 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
AA1	Particulate matter (PM10)	Daily	40	Monthly average < ELV	14	µg/Nm3	yes	OTH	N/A	EN12341
AA2	Particulate matter (PM10)	Daily	40	Monthly average < ELV	16	µg/Nm3	yes	OTH	N/A	EN12341
AA3	Particulate matter (PM10)	Daily	40	Monthly average < ELV	11	µg/Nm3	yes	OTH	N/A	EN12341

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

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Continuous Monitoring		

<p>4 Does your site carry out continuous air emissions monitoring?</p> <p>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)</p>	Yes	
<p>5 Did continuous monitoring equipment experience downtime? If yes please record downtime in table A2 below</p>	N/A	
<p>6 Do you have a proactive service agreement for each piece of continuous monitoring equipment?</p>	N/A	
<p>7 Did your site experience any abatement system bypasses? If yes please detail them in table A3 below</p>	N/A	

Table A2: Summary of average emissions -continuous monitoring

Emission reference no:	Parameter/ Substance	ELV in licence or any revision thereof	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					

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:	W0289-01	Year	2017	
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						No		
Table A4: Solvent Management Plan Summary Total VOC Emission limit value				Please refer to linked solvent regulations to complete table 5 and 6 Solvent regulations				
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.	Solvents destroyed onsite through	Total emission of Solvent to air (kg)
Total								

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER) Lic No: W0289-01 Year 2017

		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 licensed emissions you only need to complete table W1 and or W2 for storm water analysis and visual inspections	Yes Licensed emissions apply to any discharges to Cork Harbour from the site. In 2017 there were No discharges to Cork Harbour. Any discharge from the settlement system, after an appropriate settlement time, will be dispersed via infiltration trenches/pits into the waste body. It is not the intention to pump directly into any watercourse during the works.
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 N/a

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
	SELECT	SELECT	SELECT			SELECT		SELECT	SELECT	
	SELECT	SELECT	SELECT			SELECT		SELECT	SELECT	

*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)

		Additional information
3	Was there any result in breach of licence requirements? If yes please provide brief details in the comment section of Table W3 below	No
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	SELECT N/A

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

Emission reference no:	Emission released to	Parameter/ Substance ^{Note 1}	Type of sample	Frequency of monitoring	Averaging period	ELV or trigger values in licence or any revision thereof ^{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? Additional Information

No	
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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	N/A
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7 Do you have a proactive service contract for each piece of continuous monitoring equipment on site?

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

SELECT	N/A
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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 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)

- 1 Please provide integrity testing frequency period
- 2 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)
- 3 How many bunds are on site?
- 4 How many of these bunds have been tested within the required test schedule?
- 5 How many mobile bunds are on site?
- 6 Are the mobile bunds included in the bund test schedule?
- 7 How many of these mobile bunds have been tested within the required test schedule?
- 8 How many sumps on site are included in the integrity test schedule?
- 9 How many of these sumps are integrity tested within the test schedule?

No	
SELECT	N/A
SELECT	N/A
	N/A
	N/A
	N/A
SELECT	N/A
	N/A
	N/A
	N/A
	N/A
N/A	
N/A	
N/A	

- 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?

[bundling and storage guidelines](#)

- 16 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

- 2 Please provide integrity testing frequency period
- *please note integrity testing means water tightness testing of all underground pipelines (as required under your licence)

No	
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

Groundwater/Soil monitoring template	Lic No: W0289-01	Year: 2017
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		Comments
1	Are you required to carry out groundwater monitoring as part of your licence requirements?	Licensed activities only commenced in December 2017. Licence requires groundwater monitoring to be completed biannually.
2	Are you required to carry out soil monitoring as part of your licence requirements?	
3	Do you extract groundwater for use on site? If yes please specify use in comment section	
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.	First round of monitoring results completed in Dec 2017. Establishing trend will be ongoing in 2018.
5	Is the contamination related to operations at the facility (either current and/or historic)	Historic
6	Have actions been taken to address contamination issues? If yes please summarise remediation strategies proposed/undertaken for the site	<p>The overall project involves the remediation of the East Tip Site at Haulbowline Island, Cork Harbour, Ireland. The site is a former steelworks tip located on the eastern side of the island and covers an area of approximately 9ha.</p> <p>The East Tip comprises, inter alia, general spoil and scrap metal, mill-scale, unprocessed slag, processed slag and construction and demolition waste and other waste material (including hazardous waste) which have been deposited over several decades onto a sand spit adjacent to the original island.</p> <p>The remediation works shall include the reprofiling and processing of the materials that</p>
7	Please specify the proposed time frame for the remediation strategy	12 months
8	Is there a licence condition to carry out/update ELRA for the site?	A CRAMP has been prepared and submitted to the EPA in July 2017. Pending approval by the EPA for this.
9	Has any type of risk assessment been carried out for the site?	
10	Has a Conceptual Site Model been developed for the site?	<p>As part of the EIS/DQRA</p> <p>Note, as stated in the DQRA (Section 5.6) there is no 'perched' groundwater table on the site, or a 'groundwater table' in the traditional sense of land based assessments. Instead, the saturated mass of waste material is in a perpetual state hydraulic interaction with the surrounding tidal waters of the estuary (i.e. direct hydraulic continuity with the sea).</p>
11	Have potential receptors been identified on and off site?	As stated within the DQRA

Groundwater/Soil monitoring template		Lic No:	W0289-01	Year	2017
12	Is there evidence that contamination is migrating offsite?	no	<p>As concluded in the DQRA (Appendix to EIS) : During the generic assessment, groundwater contaminant concentrations associated with the waste material including arsenic, chromium, chromium VI, copper, zinc, lead, manganese, nickel and mercury were found to be present at levels greater than respective conservative screening levels and as a result were further assessed through completion of a bespoke DQRA to evaluate the potential impact upon Cork Harbour waters. However, it should be noted that sampling and analysis of seepages leaving the waste material during low tide onto the foreshore and also sampling of the Cork Harbour waters during low tide have typically not identified contaminant concentrations in excess of relevant WQSS.</p> <p>Currently therefore there is no evidence to suggest actual pollution of Cork Harbour waters is occurring to the extent that WQSS are being exceeded.</p>		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*	SELECT**	Upward trend in pollutant concentration over last 5 years of monitoring data
							SELECT			SELECT
							SELECT			SELECT

+ 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 result

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
21/12/2017	BH310B	Dissolved Aluminium	TM30/PM14	Bi-annual		4.5	ug/l			N/a
21/12/2017	BH310B	Dissolved Arsenic	TM30/PM14	Bi-annual		6.1	ug/l	7.5mg/l As	IGV	N/a
21/12/2017	BH310B	Dissolved Cadmium	TM30/PM14	Bi-annual		<0.03	ug/l	3.75mg/l Cd	IGV	N/a
21/12/2017	BH310B	Total Dissolved Chromium	TM30/PM14	Bi-annual		1.5	ug/l			N/a
21/12/2017	BH310B	Dissolved Copper	TM30/PM14	Bi-annual		<3	ug/l	1500 mg/l Cu	IGV	N/a
21/12/2017	BH310B	Dissolved Lead	TM30/PM14	Bi-annual		<0.4	ug/l	18.75 mg/l Pb		N/a
21/12/2017	BH310B	Dissolved Manganese	TM30/PM14	Bi-annual		223.6	ug/l			N/a
21/12/2017	BH310B	Dissolved Nickel	TM30/PM14	Bi-annual		<0.2	ug/l			N/a
21/12/2017	BH310B	Dissolved Zinc	TM30/PM14	Bi-annual		<1.5	ug/l			N/a
21/12/2017	BH310B	Mercury Dissolved by CVAf	TM61/PM38	Bi-annual		<0.01	ug/l	0.75mg/l Hg	IGV	N/a
21/12/2017	BH310B	Hexavalent Chromium	TM38/PM0	Bi-annual		<2	ug/l		IGV	N/a

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21/12/2017	BH310B	Dissolved Oxygen	TM59/PM0	Bi-annual	<1	mg/l			N/a
21/12/2017	BH310B	Electrical Conductivity @25C	TM76/PM0	Bi-annual	48818	uS/cm	800mS/cm	IGV	N/a
21/12/2017	BH310B	pH	TM73/PM0	Bi-annual	8.42	pH units			N/a
21/12/2017	BH310B	Redox	TM72/PM0	Bi-annual	-411.29	mV			N/a
21/12/2017	BH310B	GRO (>C4-C8)	TM36/PM12	Bi-annual	<10	ug/l			N/a
21/12/2017	BH310B	GRO (>C8-C12)	TM36/PM12	Bi-annual	<10	ug/l			N/a
21/12/2017	BH310B	GRO (>C4-C12)	TM36/PM12	Bi-annual	<10	ug/l			N/a
21/12/2017	BH310B	EPH (C8-C40)	TM5/PM30	Bi-annual	60	ug/l			N/a
21/12/2017	BH310B	Naphthalene	TM4/PM30	Bi-annual	<0.1	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Acenaphthylene	TM4/PM30	Bi-annual	<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Acenaphthene	TM4/PM30	Bi-annual	<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Fluorene	TM4/PM30	Bi-annual	<0.014	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Phenanthrene	TM4/PM30	Bi-annual	<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Anthracene	TM4/PM30	Bi-annual	<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Fluoranthene	TM4/PM30	Bi-annual	<0.012	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Pyrene	TM4/PM30	Bi-annual	<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Benzo(a)anthracene	TM4/PM30	Bi-annual	<0.015	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Chrysene	TM4/PM30	Bi-annual	<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Benzo(bk)fluoranthene	TM4/PM30	Bi-annual	<0.018	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Benzo(a)pyrene	TM4/PM30	Bi-annual	<0.016	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Indeno(123cd)pyrene	TM4/PM30	Bi-annual	<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Dibenzo(ah)anthracene	TM4/PM30	Bi-annual	<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Benzo(ghi)perylene	TM4/PM30	Bi-annual	<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	PAH 16 Total	TM4/PM30	Bi-annual	<0.195	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Benzo(b)fluoranthene	TM4/PM30	Bi-annual	<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Benzo(k)fluoranthene	TM4/PM30	Bi-annual	<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306A(B)	Dissolved Aluminium	TM30/PM14	Bi-annual	1.6	ug/l			N/a
21/12/2017	BH306A(B)	Dissolved Arsenic	TM30/PM14	Bi-annual	<0.9	ug/l	7.5mg/l As	IGV	N/a
21/12/2017	BH306A(B)	Dissolved Cadmium	TM30/PM14	Bi-annual	<0.03	ug/l	3.75mg/l Cd	IGV	N/a
21/12/2017	BH306A(B)	Total Dissolved Chromium	TM30/PM14	Bi-annual	18.7	ug/l			N/a
21/12/2017	BH306A(B)	Dissolved Copper	TM30/PM14	Bi-annual	<3	ug/l	1500 mg/l Cu	IGV	N/a
21/12/2017	BH306A(B)	Dissolved Lead	TM30/PM14	Bi-annual	<0.4	ug/l	18.75 mg/l Pb		N/a
21/12/2017	BH306A(B)	Dissolved Manganese	TM30/PM14	Bi-annual	<1.5	ug/l			N/a
21/12/2017	BH306A(B)	Dissolved Nickel	TM30/PM14	Bi-annual	<0.2	ug/l			N/a
21/12/2017	BH306A(B)	Dissolved Zinc	TM30/PM14	Bi-annual	<1.5	ug/l			N/a
21/12/2017	BH306A(B)	Mercury Dissolved by CVAf	TM61/PM38	Bi-annual	<0.01	ug/l	0.75mg/l Hg	IGV	N/a
21/12/2017	BH306A(B)	Hexavalent Chromium	TM38/PM0	Bi-annual	0.017	mg/l		IGV	N/a
21/12/2017	BH306A(B)	Dissolved Oxygen	TM59/PM0	Bi-annual	9	mg/l			N/a
21/12/2017	BH306A(B)	Electrical Conductivity @25C	TM76/PM0	Bi-annual	47592	uS/cm	800mS/cm	IGV	N/a
21/12/2017	BH306A(B)	pH	TM73/PM0	Bi-annual	9.37	pH units			N/a
21/12/2017	BH306A(B)	Redox	TM72/PM0	Bi-annual	-85.47	mV			N/a
21/12/2017	BH306A(B)	GRO (>C4-C8)	TM36/PM12	Bi-annual	<10	ug/l			N/a
21/12/2017	BH306A(B)	GRO (>C8-C12)	TM36/PM12	Bi-annual	<10	ug/l			N/a
21/12/2017	BH306A(B)	GRO (>C4-C12)	TM36/PM12	Bi-annual	<10	ug/l			N/a
21/12/2017	BH306A(B)	EPH (C8-C40)	TM5/PM30	Bi-annual	<10	ug/l			N/a
21/12/2017	BH306A(B)	Naphthalene	TM4/PM30	Bi-annual	<0.1	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306A(B)	Acenaphthylene	TM4/PM30	Bi-annual	<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306A(B)	Acenaphthene	TM4/PM30	Bi-annual	<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306A(B)	Fluorene	TM4/PM30	Bi-annual	<0.014	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306A(B)	Phenanthrene	TM4/PM30	Bi-annual	0.019	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306A(B)	Anthracene	TM4/PM30	Bi-annual	0.015	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306A(B)	Fluoranthene	TM4/PM30	Bi-annual	0.019	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306A(B)	Pyrene	TM4/PM30	Bi-annual	0.018	ug/l	0.075 mg/l	IGV	N/a

Groundwater/Soil monitoring template					Lic No:	W0289-01	Year	2017		
21/12/2017	BH306A(B)	Benzo(a)anthracene	TM4/PM30	Bi-annual		0.015	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306A(B)	Chrysene	TM4/PM30	Bi-annual		0.017	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306A(B)	Benzo(bk)fluoranthene	TM4/PM30	Bi-annual		0.031	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306A(B)	Benzo(a)pyrene	TM4/PM30	Bi-annual		0.016	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306A(B)	Indeno(123cd)pyrene	TM4/PM30	Bi-annual		0.015	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306A(B)	Dibenzo(ah)anthracene	TM4/PM30	Bi-annual		0.02	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306A(B)	Benzo(ghi)perylene	TM4/PM30	Bi-annual		0.018	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306A(B)	PAH 16 Total	TM4/PM30	Bi-annual		0.203	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306A(B)	Benzo(b)fluoranthene	TM4/PM30	Bi-annual		0.02	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306A(B)	Benzo(k)fluoranthene	TM4/PM30	Bi-annual		<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310A	Dissolved Aluminium	TM30/PM14	Bi-annual		68.9	ug/l			N/a
21/12/2017	BH310A	Dissolved Arsenic	TM30/PM14	Bi-annual		2	ug/l	7.5mg/l As	IGV	N/a
21/12/2017	BH310A	Dissolved Cadmium	TM30/PM14	Bi-annual		<0.03	ug/l	3.75mg/l Cd	IGV	N/a
21/12/2017	BH310A	Total Dissolved Chromium	TM30/PM14	Bi-annual		130.3	ug/l			N/a
21/12/2017	BH310A	Dissolved Copper	TM30/PM14	Bi-annual		5	ug/l	1500 mg/l Cu	IGV	N/a
21/12/2017	BH310A	Dissolved Lead	TM30/PM14	Bi-annual		18.2	ug/l	18.75 mg/l Pb		N/a
21/12/2017	BH310A	Dissolved Manganese	TM30/PM14	Bi-annual		53.8	ug/l			N/a
21/12/2017	BH310A	Dissolved Nickel	TM30/PM14	Bi-annual		4.3	ug/l			N/a
21/12/2017	BH310A	Dissolved Zinc	TM30/PM14	Bi-annual		23.9	ug/l			N/a
21/12/2017	BH310A	Mercury Dissolved by CVAf	TM61/PM38	Bi-annual		<0.01	ug/l	0.75mg/l Hg	IGV	N/a
21/12/2017	BH310A	Hexavalent Chromium	TM38/PM0	Bi-annual		0.11	mg/l		IGV	N/a
21/12/2017	BH310A	Dissolved Oxygen	TM59/PM0	Bi-annual		8	mg/l			N/a
21/12/2017	BH310A	Electrical Conductivity @25C	TM76/PM0	Bi-annual		45425	uS/cm	800mS/cm	IGV	N/a
21/12/2017	BH310A	pH	TM73/PM0	Bi-annual		9.51	pH units			N/a
21/12/2017	BH310A	Redox	TM72/PM0	Bi-annual		-60.49	mV			N/a
21/12/2017	BH310A	GRO (>C4-C8)	TM36/PM12	Bi-annual		<10	ug/l			N/a
21/12/2017	BH310A	GRO (>C8-C12)	TM36/PM12	Bi-annual		<10	ug/l			N/a
21/12/2017	BH310A	GRO (>C4-C12)	TM36/PM12	Bi-annual		<10	ug/l			N/a
21/12/2017	BH310A	EPH (C8-C40)	TM5/PM30	Bi-annual		<10	ug/l			N/a
21/12/2017	BH310A	Naphthalene	TM4/PM30	Bi-annual		<0.1	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310A	Acenaphthylene	TM4/PM30	Bi-annual		<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310A	Acenaphthene	TM4/PM30	Bi-annual		0.022	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310A	Fluorene	TM4/PM30	Bi-annual		0.017	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310A	Phenanthrene	TM4/PM30	Bi-annual		0.022	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310A	Anthracene	TM4/PM30	Bi-annual		0.014	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310A	Fluoranthene	TM4/PM30	Bi-annual		0.022	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310A	Pyrene	TM4/PM30	Bi-annual		0.016	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310A	Benzo(a)anthracene	TM4/PM30	Bi-annual		<0.015	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310A	Chrysene	TM4/PM30	Bi-annual		0.012	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310A	Benzo(bk)fluoranthene	TM4/PM30	Bi-annual		0.018	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310A	Benzo(a)pyrene	TM4/PM30	Bi-annual		<0.016	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310A	Indeno(123cd)pyrene	TM4/PM30	Bi-annual		<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310A	Dibenzo(ah)anthracene	TM4/PM30	Bi-annual		0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310A	Benzo(ghi)perylene	TM4/PM30	Bi-annual		0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310A	PAH 16 Total	TM4/PM30	Bi-annual		<0.195	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310A	Benzo(b)fluoranthene	TM4/PM30	Bi-annual		0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310A	Benzo(k)fluoranthene	TM4/PM30	Bi-annual		<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312A	Dissolved Aluminium	TM30/PM14	Bi-annual		5.4	ug/l			N/a
21/12/2017	BH312A	Dissolved Arsenic	TM30/PM14	Bi-annual		<0.9	ug/l	7.5mg/l As	IGV	N/a
21/12/2017	BH312A	Dissolved Cadmium	TM30/PM14	Bi-annual		<0.03	ug/l	3.75mg/l Cd	IGV	N/a
21/12/2017	BH312A	Total Dissolved Chromium	TM30/PM14	Bi-annual		<0.2	ug/l			N/a

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21/12/2017	BH312A	Dissolved Copper	TM30/PM14	Bi-annual	<3	ug/l	1500 mg/l Cu	IGV	N/a
21/12/2017	BH312A	Dissolved Lead	TM30/PM14	Bi-annual	<0.4	ug/l	18.75 mg/l Pb		N/a
21/12/2017	BH312A	Dissolved Manganese	TM30/PM14	Bi-annual	31.3	ug/l			N/a
21/12/2017	BH312A	Dissolved Nickel	TM30/PM14	Bi-annual	0.3	ug/l			N/a
21/12/2017	BH312A	Dissolved Zinc	TM30/PM14	Bi-annual	<1.5	ug/l			N/a
21/12/2017	BH312A	Mercury Dissolved by CVAf	TM61/PM38	Bi-annual	<0.01	ug/l	0.75mg/l Hg	IGV	N/a
21/12/2017	BH312A	Hexavalent Chromium	TM38/PM0	Bi-annual	<0.006	mg/l		IGV	N/a
21/12/2017	BH312A	Dissolved Oxygen	TM59/PM0	Bi-annual	7	mg/l			N/a
21/12/2017	BH312A	Electrical Conductivity @25C	TM76/PM0	Bi-annual	34584	uS/cm	800mS/cm	IGV	N/a
21/12/2017	BH312A	pH	TM73/PM0	Bi-annual	9.33	pH units			N/a
21/12/2017	BH312A	Redox	TM72/PM0	Bi-annual	-27.71	mV			N/a
21/12/2017	BH312A	GRO (>C4-C8)	TM36/PM12	Bi-annual	<10	ug/l			N/a
21/12/2017	BH312A	GRO (>C8-C12)	TM36/PM12	Bi-annual	<10	ug/l			N/a
21/12/2017	BH312A	GRO (>C4-C12)	TM36/PM12	Bi-annual	<10	ug/l			N/a
21/12/2017	BH312A	EPH (C8-C40)	TM5/PM30	Bi-annual	<10	ug/l			N/a
21/12/2017	BH312A	Naphthalene	TM4/PM30	Bi-annual	0.6	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312A	Acenaphthylene	TM4/PM30	Bi-annual	0.034	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312A	Acenaphthene	TM4/PM30	Bi-annual	0.102	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312A	Fluorene	TM4/PM30	Bi-annual	0.085	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312A	Phenanthrene	TM4/PM30	Bi-annual	0.128	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312A	Anthracene	TM4/PM30	Bi-annual	0.017	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312A	Fluoranthene	TM4/PM30	Bi-annual	0.032	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312A	Pyrene	TM4/PM30	Bi-annual	0.025	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312A	Benzo(a)anthracene	TM4/PM30	Bi-annual	<0.015	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312A	Chrysene	TM4/PM30	Bi-annual	<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312A	Benzo(bk)fluoranthene	TM4/PM30	Bi-annual	<0.018	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312A	Benzo(a)pyrene	TM4/PM30	Bi-annual	<0.016	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312A	Indeno(123cd)pyrene	TM4/PM30	Bi-annual	<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312A	Dibenzo(ah)anthracene	TM4/PM30	Bi-annual	<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312A	Benzo(ghi)perylene	TM4/PM30	Bi-annual	<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312A	PAH 16 Total	TM4/PM30	Bi-annual	1.023	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312A	Benzo(b)fluoranthene	TM4/PM30	Bi-annual	<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312A	Benzo(k)fluoranthene	TM4/PM30	Bi-annual	<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH311	Dissolved Aluminium	TM30/PM14	Bi-annual	762.8	ug/l			N/a
21/12/2017	BH311	Dissolved Arsenic	TM30/PM14	Bi-annual	<0.9	ug/l	7.5mg/l As	IGV	N/a
21/12/2017	BH311	Dissolved Cadmium	TM30/PM14	Bi-annual	<0.03	ug/l	3.75mg/l Cd	IGV	N/a
21/12/2017	BH311	Total Dissolved Chromium	TM30/PM14	Bi-annual	26.8	ug/l			N/a
21/12/2017	BH311	Dissolved Copper	TM30/PM14	Bi-annual	7	ug/l	1500 mg/l Cu	IGV	N/a
21/12/2017	BH311	Dissolved Lead	TM30/PM14	Bi-annual	21.1	ug/l	18.75 mg/l Pb		N/a
21/12/2017	BH311	Dissolved Manganese	TM30/PM14	Bi-annual	212.9	ug/l			N/a
21/12/2017	BH311	Dissolved Nickel	TM30/PM14	Bi-annual	4.1	ug/l			N/a
21/12/2017	BH311	Dissolved Zinc	TM30/PM14	Bi-annual	54.9	ug/l			N/a
21/12/2017	BH311	Mercury Dissolved by CVAf	TM61/PM38	Bi-annual	<0.01	ug/l	0.75mg/l Hg	IGV	N/a
21/12/2017	BH311	Hexavalent Chromium	TM38/PM0	Bi-annual	<0.006	mg/l		IGV	N/a
21/12/2017	BH311	Dissolved Oxygen	TM59/PM0	Bi-annual	5	mg/l			N/a
21/12/2017	BH311	Electrical Conductivity @25C	TM76/PM0	Bi-annual	50110	uS/cm	800mS/cm	IGV	N/a
21/12/2017	BH311	pH	TM73/PM0	Bi-annual	8.4	pH units			N/a
21/12/2017	BH311	Redox	TM72/PM0	Bi-annual	-9.18	mV			N/a
21/12/2017	BH311	GRO (>C4-C8)	TM36/PM12	Bi-annual	<10	ug/l			N/a
21/12/2017	BH311	GRO (>C8-C12)	TM36/PM12	Bi-annual	<10	ug/l			N/a

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21/12/2017	BH311	GRO (>C4-C12)	TM36/PM12	Bi-annual	<10	ug/l		N/a	
21/12/2017	BH311	EPH (C8-C40)	TM5/PM30	Bi-annual	<10	ug/l		N/a	
21/12/2017	BH311	Naphthalene	TM4/PM30	Bi-annual	<0.1	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH311	Acenaphthylene	TM4/PM30	Bi-annual	<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH311	Acenaphthene	TM4/PM30	Bi-annual	0.024	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH311	Fluorene	TM4/PM30	Bi-annual	<0.014	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH311	Phenanthrene	TM4/PM30	Bi-annual	0.019	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH311	Anthracene	TM4/PM30	Bi-annual	<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH311	Fluoranthene	TM4/PM30	Bi-annual	0.067	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH311	Pyrene	TM4/PM30	Bi-annual	0.022	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH311	Benzo(a)anthracene	TM4/PM30	Bi-annual	<0.015	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH311	Chrysene	TM4/PM30	Bi-annual	<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH311	Benzo(b)fluoranthene	TM4/PM30	Bi-annual	<0.018	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH311	Benzo(a)pyrene	TM4/PM30	Bi-annual	<0.016	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH311	Indeno(123cd)pyrene	TM4/PM30	Bi-annual	<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH311	Dibenzo(ah)anthracene	TM4/PM30	Bi-annual	<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH311	Benzo(ghi)perylene	TM4/PM30	Bi-annual	<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH311	PAH 16 Total	TM4/PM30	Bi-annual	<0.195	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH311	Benzo(b)fluoranthene	TM4/PM30	Bi-annual	<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH311	Benzo(k)fluoranthene	TM4/PM30	Bi-annual	<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306D	Dissolved Aluminium	TM30/PM14	Bi-annual	363.7	ug/l			N/a
21/12/2017	BH306D	Dissolved Arsenic	TM30/PM14	Bi-annual	<0.9	ug/l	7.5mg/l As	IGV	N/a
21/12/2017	BH306D	Dissolved Cadmium	TM30/PM14	Bi-annual	<0.03	ug/l	3.75mg/l Cd	IGV	N/a
21/12/2017	BH306D	Total Dissolved Chromium	TM30/PM14	Bi-annual	8.7	ug/l			N/a
21/12/2017	BH306D	Dissolved Copper	TM30/PM14	Bi-annual	<3	ug/l	1500 mg/l Cu	IGV	N/a
21/12/2017	BH306D	Dissolved Lead	TM30/PM14	Bi-annual	35	ug/l	18.75 mg/l Pb		N/a
21/12/2017	BH306D	Dissolved Manganese	TM30/PM14	Bi-annual	1313	ug/l			N/a
21/12/2017	BH306D	Dissolved Nickel	TM30/PM14	Bi-annual	4.4	ug/l			N/a
21/12/2017	BH306D	Dissolved Zinc	TM30/PM14	Bi-annual	382.9	ug/l			N/a
21/12/2017	BH306D	Mercury Dissolved by CVAf	TM61/PM38	Bi-annual	<0.01	ug/l	0.75mg/l Hg	IGV	N/a
21/12/2017	BH306D	Hexavalent Chromium	TM38/PM0	Bi-annual	<0.006	mg/l		IGV	N/a
21/12/2017	BH306D	Dissolved Oxygen	TM59/PM0	Bi-annual	<1	mg/l			N/a
21/12/2017	BH306D	Electrical Conductivity @25C	TM76/PM0	Bi-annual	47668	uS/cm	800mS/cm	IGV	N/a
21/12/2017	BH306D	pH	TM73/PM0	Bi-annual	7.5	pH units			N/a
21/12/2017	BH306D	Redox	TM72/PM0	Bi-annual	-366.58	mV			N/a
21/12/2017	BH306D	GRO (>C4-C8)	TM36/PM12	Bi-annual	<10	ug/l			N/a
21/12/2017	BH306D	GRO (>C8-C12)	TM36/PM12	Bi-annual	<10	ug/l			N/a
21/12/2017	BH306D	GRO (>C4-C12)	TM36/PM12	Bi-annual	<10	ug/l			N/a
21/12/2017	BH306D	EPH (C8-C40)	TM5/PM30	Bi-annual	<10	ug/l			N/a
21/12/2017	BH306D	Naphthalene	TM4/PM30	Bi-annual	<0.1	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306D	Acenaphthylene	TM4/PM30	Bi-annual	<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306D	Acenaphthene	TM4/PM30	Bi-annual	<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306D	Fluorene	TM4/PM30	Bi-annual	<0.014	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306D	Phenanthrene	TM4/PM30	Bi-annual	<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306D	Anthracene	TM4/PM30	Bi-annual	<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306D	Fluoranthene	TM4/PM30	Bi-annual	<0.012	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306D	Pyrene	TM4/PM30	Bi-annual	<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306D	Benzo(a)anthracene	TM4/PM30	Bi-annual	0.02	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306D	Chrysene	TM4/PM30	Bi-annual	0.018	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306D	Benzo(bk)fluoranthene	TM4/PM30	Bi-annual	0.051	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306D	Benzo(a)pyrene	TM4/PM30	Bi-annual	0.018	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306D	Indeno(123cd)pyrene	TM4/PM30	Bi-annual	0.021	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306D	Dibenzo(ah)anthracene	TM4/PM30	Bi-annual	0.02	ug/l	0.075 mg/l	IGV	N/a

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21/12/2017	BH306D	Benzo(ghi)perylene	TM4/PM30	Bi-annual		0.024	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306D	PAH 16 Total	TM4/PM30	Bi-annual		<0.195	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306D	Benzo(b)fluoranthene	TM4/PM30	Bi-annual		0.04	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306D	Benzo(k)fluoranthene	TM4/PM30	Bi-annual		0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Dissolved Aluminium	TM30/PM14	Bi-annual		2.7	ug/l			N/a
21/12/2017	BH310B	Dissolved Arsenic	TM30/PM14	Bi-annual		16.8	ug/l	7.5mg/l As	IGV	N/a
21/12/2017	BH310B	Dissolved Cadmium	TM30/PM14	Bi-annual		<0.03	ug/l	3.75mg/l Cd	IGV	N/a
21/12/2017	BH310B	Total Dissolved Chromium	TM30/PM14	Bi-annual		3	ug/l			N/a
21/12/2017	BH310B	Dissolved Copper	TM30/PM14	Bi-annual		<3	ug/l	1500 mg/l Cu	IGV	N/a
21/12/2017	BH310B	Dissolved Lead	TM30/PM14	Bi-annual		<0.4	ug/l	18.75 mg/l Pb		N/a
21/12/2017	BH310B	Dissolved Manganese	TM30/PM14	Bi-annual		2662	ug/l			N/a
21/12/2017	BH310B	Dissolved Nickel	TM30/PM14	Bi-annual		<0.2	ug/l			N/a
21/12/2017	BH310B	Dissolved Zinc	TM30/PM14	Bi-annual		<1.5	ug/l			N/a
21/12/2017	BH310B	Mercury Dissolved by CVAf	TM61/PM38	Bi-annual		<0.01	ug/l	0.75mg/l Hg	IGV	N/a
21/12/2017	BH310B	Hexavalent Chromium	TM38/PM0	Bi-annual		<0.006	mg/l		IGV	N/a
21/12/2017	BH310B	Dissolved Oxygen	TM59/PM0	Bi-annual		1	mg/l			N/a
21/12/2017	BH310B	Electrical Conductivity @25C	TM76/PM0	Bi-annual		48887	uS/cm	800mS/cm	IGV	N/a
21/12/2017	BH310B	pH	TM73/PM0	Bi-annual		7.54	pH units			N/a
21/12/2017	BH310B	Redox	TM72/PM0	Bi-annual		-35.14	mV			N/a
21/12/2017	BH310B	GRO (>C4-C8)	TM36/PM12	Bi-annual		<10	ug/l			N/a
21/12/2017	BH310B	GRO (>C8-C12)	TM36/PM12	Bi-annual		<10	ug/l			N/a
21/12/2017	BH310B	GRO (>C4-C12)	TM36/PM12	Bi-annual		<10	ug/l			N/a
21/12/2017	BH310B	EPH (C8-C40)	TM5/PM30	Bi-annual		<10	ug/l			N/a
21/12/2017	BH310B	Naphthalene	TM4/PM30	Bi-annual		<0.1	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Acenaphthylene	TM4/PM30	Bi-annual		<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Acenaphthene	TM4/PM30	Bi-annual		<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Fluorene	TM4/PM30	Bi-annual		<0.014	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Phenanthrene	TM4/PM30	Bi-annual		0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Anthracene	TM4/PM30	Bi-annual		<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Fluoranthene	TM4/PM30	Bi-annual		<0.012	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Pyrene	TM4/PM30	Bi-annual		<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Benzo(a)anthracene	TM4/PM30	Bi-annual		<0.015	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Chrysene	TM4/PM30	Bi-annual		0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Benzo(bk)fluoranthene	TM4/PM30	Bi-annual		0.029	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Benzo(a)pyrene	TM4/PM30	Bi-annual		<0.016	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Indeno(123cd)pyrene	TM4/PM30	Bi-annual		0.014	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Dibenzo(ah)anthracene	TM4/PM30	Bi-annual		0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Benzo(ghi)perylene	TM4/PM30	Bi-annual		0.015	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	PAH 16 Total	TM4/PM30	Bi-annual		<0.195	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Benzo(b)fluoranthene	TM4/PM30	Bi-annual		0.02	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310B	Benzo(k)fluoranthene	TM4/PM30	Bi-annual		<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312B	Dissolved Aluminium	TM30/PM14	Bi-annual		8.2	ug/l			N/a
21/12/2017	BH312B	Dissolved Arsenic	TM30/PM14	Bi-annual		<0.9	ug/l	7.5mg/l As	IGV	N/a
21/12/2017	BH312B	Dissolved Cadmium	TM30/PM14	Bi-annual		<0.03	ug/l	3.75mg/l Cd	IGV	N/a
21/12/2017	BH312B	Total Dissolved Chromium	TM30/PM14	Bi-annual		<0.2	ug/l			N/a
21/12/2017	BH312B	Dissolved Copper	TM30/PM14	Bi-annual		<3	ug/l	1500 mg/l Cu	IGV	N/a
21/12/2017	BH312B	Dissolved Lead	TM30/PM14	Bi-annual		<0.4	ug/l	18.75 mg/l Pb		N/a
21/12/2017	BH312B	Dissolved Manganese	TM30/PM14	Bi-annual		115.1	ug/l			N/a
21/12/2017	BH312B	Dissolved Nickel	TM30/PM14	Bi-annual		<0.2	ug/l			N/a
21/12/2017	BH312B	Dissolved Zinc	TM30/PM14	Bi-annual		<1.5	ug/l			N/a

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21/12/2017	BH312B	Mercury Dissolved by CVAF	TM61/PM38	Bi-annual		<0.01	ug/l	0.75mg/l Hg	IGV	N/a
21/12/2017	BH312B	Hexavalent Chromium	TM38/PM0	Bi-annual		<0.006	mg/l		IGV	N/a
21/12/2017	BH312B	Dissolved Oxygen	TM59/PM0	Bi-annual		6	mg/l			N/a
21/12/2017	BH312B	Electrical Conductivity @25C	TM76/PM0	Bi-annual		40163	uS/cm	800mS/cm	IGV	N/a
21/12/2017	BH312B	pH	TM73/PM0	Bi-annual		8.93	pH units			N/a
21/12/2017	BH312B	Redox	TM72/PM0	Bi-annual		-9.32	mV			N/a
21/12/2017	BH312B	GRO (>C4-C8)	TM36/PM12	Bi-annual		<10	ug/l			N/a
21/12/2017	BH312B	GRO (>C8-C12)	TM36/PM12	Bi-annual		<10	ug/l			N/a
21/12/2017	BH312B	GRO (>C4-C12)	TM36/PM12	Bi-annual		<10	ug/l			N/a
21/12/2017	BH312B	EPH (C8-C40)	TM5/PM30	Bi-annual		<10	ug/l			N/a
21/12/2017	BH312B	Naphthalene	TM4/PM30	Bi-annual		0.5	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312B	Acenaphthylene	TM4/PM30	Bi-annual		0.019	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312B	Acenaphthene	TM4/PM30	Bi-annual		0.098	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312B	Fluorene	TM4/PM30	Bi-annual		0.101	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312B	Phenanthrene	TM4/PM30	Bi-annual		0.244	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312B	Anthracene	TM4/PM30	Bi-annual		0.027	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312B	Fluoranthene	TM4/PM30	Bi-annual		0.075	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312B	Pyrene	TM4/PM30	Bi-annual		0.042	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312B	Benzo(a)anthracene	TM4/PM30	Bi-annual		<0.015	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312B	Chrysene	TM4/PM30	Bi-annual		<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312B	Benzo(bk)fluoranthene	TM4/PM30	Bi-annual		<0.018	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312B	Benzo(a)pyrene	TM4/PM30	Bi-annual		<0.016	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312B	Indeno(123cd)pyrene	TM4/PM30	Bi-annual		<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312B	Dibenzo(ah)anthracene	TM4/PM30	Bi-annual		<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312B	Benzo(ghi)perylene	TM4/PM30	Bi-annual		<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312B	PAH 16 Total	TM4/PM30	Bi-annual		1.106	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312B	Benzo(b)fluoranthene	TM4/PM30	Bi-annual		<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312B	Benzo(k)fluoranthene	TM4/PM30	Bi-annual		<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH116 (BH304)	Dissolved Aluminium	TM30/PM14	Bi-annual		10.3	ug/l			N/a
21/12/2017	BH116 (BH304)	Dissolved Arsenic	TM30/PM14	Bi-annual		4.2	ug/l	7.5mg/l As	IGV	N/a
21/12/2017	BH116 (BH304)	Dissolved Cadmium	TM30/PM14	Bi-annual		<0.03	ug/l	3.75mg/l Cd	IGV	N/a
21/12/2017	BH116 (BH304)	Total Dissolved Chromium	TM30/PM14	Bi-annual		9.3	ug/l			N/a
21/12/2017	BH116 (BH304)	Dissolved Copper	TM30/PM14	Bi-annual		<3	ug/l	1500 mg/l Cu	IGV	N/a
21/12/2017	BH116 (BH304)	Dissolved Lead	TM30/PM14	Bi-annual		<0.4	ug/l	18.75 mg/l Pb		N/a
21/12/2017	BH116 (BH304)	Dissolved Manganese	TM30/PM14	Bi-annual		252.5	ug/l			N/a
21/12/2017	BH116 (BH304)	Dissolved Nickel	TM30/PM14	Bi-annual		3	ug/l			N/a
21/12/2017	BH116 (BH304)	Dissolved Zinc	TM30/PM14	Bi-annual		16.4	ug/l			N/a
21/12/2017	BH116 (BH304)	Mercury Dissolved by CVAF	TM61/PM38	Bi-annual		0.04	ug/l	0.75mg/l Hg	IGV	N/a
21/12/2017	BH116 (BH304)	Hexavalent Chromium	TM38/PM0	Bi-annual		<0.006	mg/l		IGV	N/a
21/12/2017	BH116 (BH304)	Dissolved Oxygen	TM59/PM0	Bi-annual		<1	mg/l			N/a
21/12/2017	BH116 (BH304)	Electrical Conductivity @25C	TM76/PM0	Bi-annual		44570	uS/cm	800mS/cm	IGV	N/a
21/12/2017	BH116 (BH304)	pH	TM73/PM0	Bi-annual		8.46	pH units			N/a
21/12/2017	BH116 (BH304)	Redox	TM72/PM0	Bi-annual		-388.38	mV			N/a
21/12/2017	BH116 (BH304)	GRO (>C4-C8)	TM36/PM12	Bi-annual		<10	ug/l			N/a
21/12/2017	BH116 (BH304)	GRO (>C8-C12)	TM36/PM12	Bi-annual		<10	ug/l			N/a
21/12/2017	BH116 (BH304)	GRO (>C4-C12)	TM36/PM12	Bi-annual		<10	ug/l			N/a
21/12/2017	BH116 (BH304)	EPH (C8-C40)	TM5/PM30	Bi-annual		<10	ug/l			N/a
21/12/2017	BH116 (BH304)	Naphthalene	TM4/PM30	Bi-annual		<0.1	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH116 (BH304)	Acenaphthylene	TM4/PM30	Bi-annual		<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH116 (BH304)	Acenaphthene	TM4/PM30	Bi-annual		<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH116 (BH304)	Fluorene	TM4/PM30	Bi-annual		<0.014	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH116 (BH304)	Phenanthrene	TM4/PM30	Bi-annual		0.013	ug/l	0.075 mg/l	IGV	N/a

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21/12/2017	BH116 (BH304)	Anthracene	TM4/PM30	Bi-annual		<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH116 (BH304)	Fluoranthene	TM4/PM30	Bi-annual		<0.012	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH116 (BH304)	Pyrene	TM4/PM30	Bi-annual		0.014	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH116 (BH304)	Benzo(a)anthracene	TM4/PM30	Bi-annual		<0.015	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH116 (BH304)	Chrysene	TM4/PM30	Bi-annual		<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH116 (BH304)	Benzo(bk)fluoranthene	TM4/PM30	Bi-annual		<0.018	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH116 (BH304)	Benzo(a)pyrene	TM4/PM30	Bi-annual		<0.016	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH116 (BH304)	Indeno(123cd)pyrene	TM4/PM30	Bi-annual		<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH116 (BH304)	Dibenzo(ah)anthracene	TM4/PM30	Bi-annual		<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH116 (BH304)	Benzo(ghi)perylene	TM4/PM30	Bi-annual		<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH116 (BH304)	PAH 16 Total	TM4/PM30	Bi-annual		<0.195	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH116 (BH304)	Benzo(b)fluoranthene	TM4/PM30	Bi-annual		<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH116 (BH304)	Benzo(k)fluoranthene	TM4/PM30	Bi-annual		<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH125R	Dissolved Aluminium	TM30/PM14	Bi-annual		<1.5	ug/l			N/a
21/12/2017	BH125R	Dissolved Arsenic	TM30/PM14	Bi-annual		6.1	ug/l	7.5mg/l As	IGV	N/a
21/12/2017	BH125R	Dissolved Cadmium	TM30/PM14	Bi-annual		1.17	ug/l	3.75mg/l Cd	IGV	N/a
21/12/2017	BH125R	Total Dissolved Chromium	TM30/PM14	Bi-annual		<0.2	ug/l			N/a
21/12/2017	BH125R	Dissolved Copper	TM30/PM14	Bi-annual		<3	ug/l	1500 mg/l Cu	IGV	N/a
21/12/2017	BH125R	Dissolved Lead	TM30/PM14	Bi-annual		<0.4	ug/l	18.75 mg/l Pb		N/a
21/12/2017	BH125R	Dissolved Manganese	TM30/PM14	Bi-annual		35.6	ug/l			N/a
21/12/2017	BH125R	Dissolved Nickel	TM30/PM14	Bi-annual		2.8	ug/l			N/a
21/12/2017	BH125R	Dissolved Zinc	TM30/PM14	Bi-annual		<1.5	ug/l			N/a
21/12/2017	BH125R	Mercury Dissolved by CVAF	TM61/PM38	Bi-annual		<0.01	ug/l	0.75mg/l Hg	IGV	N/a
21/12/2017	BH125R	Hexavalent Chromium	TM38/PM0	Bi-annual		<0.006	mg/l		IGV	N/a
21/12/2017	BH125R	Dissolved Oxygen	TM59/PM0	Bi-annual		4	mg/l			N/a
21/12/2017	BH125R	Electrical Conductivity @25C	TM76/PM0	Bi-annual		51092	uS/cm	800mS/cm	IGV	N/a
21/12/2017	BH125R	pH	TM73/PM0	Bi-annual		7.72	pH units			N/a
21/12/2017	BH125R	Redox	TM72/PM0	Bi-annual		255.73	mV			N/a
21/12/2017	BH125R	GRO (>C4-C8)	TM36/PM12	Bi-annual		<10	ug/l			N/a
21/12/2017	BH125R	GRO (>C8-C12)	TM36/PM12	Bi-annual		<10	ug/l			N/a
21/12/2017	BH125R	GRO (>C4-C12)	TM36/PM12	Bi-annual		<10	ug/l			N/a
21/12/2017	BH125R	EPH (C8-C40)	TM5/PM30	Bi-annual		<10	ug/l			N/a
21/12/2017	BH125R	Naphthalene	TM4/PM30	Bi-annual		<0.1	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH125R	Acenaphthylene	TM4/PM30	Bi-annual		<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH125R	Acenaphthene	TM4/PM30	Bi-annual		0.027	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH125R	Fluorene	TM4/PM30	Bi-annual		0.015	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH125R	Phenanthrene	TM4/PM30	Bi-annual		<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH125R	Anthracene	TM4/PM30	Bi-annual		<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH125R	Fluoranthene	TM4/PM30	Bi-annual		0.02	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH125R	Pyrene	TM4/PM30	Bi-annual		0.028	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH125R	Benzo(a)anthracene	TM4/PM30	Bi-annual		<0.015	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH125R	Chrysene	TM4/PM30	Bi-annual		<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH125R	Benzo(bk)fluoranthene	TM4/PM30	Bi-annual		<0.018	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH125R	Benzo(a)pyrene	TM4/PM30	Bi-annual		<0.016	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH125R	Indeno(123cd)pyrene	TM4/PM30	Bi-annual		<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH125R	Dibenzo(ah)anthracene	TM4/PM30	Bi-annual		<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH125R	Benzo(ghi)perylene	TM4/PM30	Bi-annual		<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH125R	PAH 16 Total	TM4/PM30	Bi-annual		<0.195	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH125R	Benzo(b)fluoranthene	TM4/PM30	Bi-annual		<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH125R	Benzo(k)fluoranthene	TM4/PM30	Bi-annual		<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH117R	Dissolved Aluminium	TM30/PM14	Bi-annual		2.4	ug/l			N/a
21/12/2017	BH117R	Dissolved Arsenic	TM30/PM14	Bi-annual		2.6	ug/l	7.5mg/l As	IGV	N/a

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21/12/2017	BH117R	Dissolved Cadmium	TM30/PM14	Bi-annual	<0.03	ug/l	3.75mg/l Cd	IGV	N/a
21/12/2017	BH117R	Total Dissolved Chromium	TM30/PM14	Bi-annual	0.4	ug/l			N/a
21/12/2017	BH117R	Dissolved Copper	TM30/PM14	Bi-annual	<3	ug/l	1500 mg/l Cu	IGV	N/a
21/12/2017	BH117R	Dissolved Lead	TM30/PM14	Bi-annual	<0.4	ug/l	18.75 mg/l Pb		N/a
21/12/2017	BH117R	Dissolved Manganese	TM30/PM14	Bi-annual	1104	ug/l			N/a
21/12/2017	BH117R	Dissolved Nickel	TM30/PM14	Bi-annual	0.4	ug/l			N/a
21/12/2017	BH117R	Dissolved Zinc	TM30/PM14	Bi-annual	<1.5	ug/l			N/a
21/12/2017	BH117R	Mercury Dissolved by CVAf	TM61/PM38	Bi-annual	<0.01	ug/l	0.75mg/l Hg	IGV	N/a
21/12/2017	BH117R	Hexavalent Chromium	TM38/PM0	Bi-annual	<0.006	mg/l		IGV	N/a
21/12/2017	BH117R	Dissolved Oxygen	TM59/PM0	Bi-annual	7	mg/l			N/a
21/12/2017	BH117R	Electrical Conductivity @25C	TM76/PM0	Bi-annual	38278	uS/cm	800mS/cm	IGV	N/a
21/12/2017	BH117R	pH	TM73/PM0	Bi-annual	7.7	pH units			N/a
21/12/2017	BH117R	Redox	TM72/PM0	Bi-annual	267.29	mV			N/a
21/12/2017	BH117R	GRO (>C4-C8)	TM36/PM12	Bi-annual	<10	ug/l			N/a
21/12/2017	BH117R	GRO (>C8-C12)	TM36/PM12	Bi-annual	<10	ug/l			N/a
21/12/2017	BH117R	GRO (>C4-C12)	TM36/PM12	Bi-annual	<10	ug/l			N/a
21/12/2017	BH117R	EPH (C8-C40)	TM5/PM30	Bi-annual	<10	ug/l			N/a
21/12/2017	BH117R	Naphthalene	TM4/PM30	Bi-annual	<0.1	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH117R	Acenaphthylene	TM4/PM30	Bi-annual	<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH117R	Acenaphthene	TM4/PM30	Bi-annual	<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH117R	Fluorene	TM4/PM30	Bi-annual	<0.014	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH117R	Phenanthrene	TM4/PM30	Bi-annual	<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH117R	Anthracene	TM4/PM30	Bi-annual	<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH117R	Fluoranthene	TM4/PM30	Bi-annual	<0.012	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH117R	Pyrene	TM4/PM30	Bi-annual	0.014	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH117R	Benzo(a)anthracene	TM4/PM30	Bi-annual	<0.015	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH117R	Chrysene	TM4/PM30	Bi-annual	<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH117R	Benzo(k)fluoranthene	TM4/PM30	Bi-annual	<0.018	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH117R	Benzo(a)pyrene	TM4/PM30	Bi-annual	<0.016	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH117R	Indeno(123cd)pyrene	TM4/PM30	Bi-annual	<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH117R	Dibenzo(ah)anthracene	TM4/PM30	Bi-annual	<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH117R	Benzo(ghi)perylene	TM4/PM30	Bi-annual	<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH117R	PAH 16 Total	TM4/PM30	Bi-annual	<0.195	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH117R	Benzo(b)fluoranthene	TM4/PM30	Bi-annual	<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH117R	Benzo(k)fluoranthene	TM4/PM30	Bi-annual	<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH313	Dissolved Aluminium	TM30/PM14	Bi-annual	62.5	ug/l			N/a
21/12/2017	BH313	Dissolved Arsenic	TM30/PM14	Bi-annual	12.5	ug/l	7.5mg/l As	IGV	N/a
21/12/2017	BH313	Dissolved Cadmium	TM30/PM14	Bi-annual	<0.03	ug/l	3.75mg/l Cd	IGV	N/a
21/12/2017	BH313	Total Dissolved Chromium	TM30/PM14	Bi-annual	2.9	ug/l			N/a
21/12/2017	BH313	Dissolved Copper	TM30/PM14	Bi-annual	<3	ug/l	1500 mg/l Cu	IGV	N/a
21/12/2017	BH313	Dissolved Lead	TM30/PM14	Bi-annual	<0.4	ug/l	18.75 mg/l Pb		N/a
21/12/2017	BH313	Dissolved Manganese	TM30/PM14	Bi-annual	1090	ug/l			N/a
21/12/2017	BH313	Dissolved Nickel	TM30/PM14	Bi-annual	1.1	ug/l			N/a
21/12/2017	BH313	Dissolved Zinc	TM30/PM14	Bi-annual	11.2	ug/l			N/a
21/12/2017	BH313	Mercury Dissolved by CVAf	TM61/PM38	Bi-annual	<0.01	ug/l	0.75mg/l Hg	IGV	N/a
21/12/2017	BH313	Hexavalent Chromium	TM38/PM0	Bi-annual	<0.006	mg/l		IGV	N/a
21/12/2017	BH313	Dissolved Oxygen	TM59/PM0	Bi-annual	<1	mg/l			N/a
21/12/2017	BH313	Electrical Conductivity @25C	TM76/PM0	Bi-annual	45826	uS/cm	800mS/cm	IGV	N/a
21/12/2017	BH313	pH	TM73/PM0	Bi-annual	8.01	pH units			N/a

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21/12/2017	BH313	Redox	TM72/PM0	Bi-annual		-373.9	mV			N/a
21/12/2017	BH313	GRO (>C4-C8)	TM36/PM12	Bi-annual		<10	ug/l			N/a
21/12/2017	BH313	GRO (>C8-C12)	TM36/PM12	Bi-annual		<10	ug/l			N/a
21/12/2017	BH313	GRO (>C4-C12)	TM36/PM12	Bi-annual		<10	ug/l			N/a
21/12/2017	BH313	EPH (C8-C40)	TM5/PM30	Bi-annual		<10	ug/l			N/a
21/12/2017	BH313	Naphthalene	TM4/PM30	Bi-annual		<0.1	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH313	Acenaphthylene	TM4/PM30	Bi-annual		<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH313	Acenaphthene	TM4/PM30	Bi-annual		<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH313	Fluorene	TM4/PM30	Bi-annual		<0.014	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH313	Phenanthrene	TM4/PM30	Bi-annual		<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH313	Anthracene	TM4/PM30	Bi-annual		<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH313	Fluoranthene	TM4/PM30	Bi-annual		<0.012	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH313	Pyrene	TM4/PM30	Bi-annual		<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH313	Benzo(a)anthracene	TM4/PM30	Bi-annual		<0.015	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH313	Chrysene	TM4/PM30	Bi-annual		<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH313	Benzo(bk)fluoranthene	TM4/PM30	Bi-annual		<0.018	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH313	Benzo(a)pyrene	TM4/PM30	Bi-annual		<0.016	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH313	Indeno(123cd)pyrene	TM4/PM30	Bi-annual		<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH313	Dibenzo(ah)anthracene	TM4/PM30	Bi-annual		<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH313	Benzo(ghi)perylene	TM4/PM30	Bi-annual		<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH313	PAH 16 Total	TM4/PM30	Bi-annual		<0.195	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH313	Benzo(b)fluoranthene	TM4/PM30	Bi-annual		<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH313	Benzo(k)fluoranthene	TM4/PM30	Bi-annual		<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306C	Dissolved Aluminium	TM30/PM14	Bi-annual		<1.5	ug/l			N/a
21/12/2017	BH306C	Dissolved Arsenic	TM30/PM14	Bi-annual		<0.9	ug/l	7.5mg/l As	IGV	N/a
21/12/2017	BH306C	Dissolved Cadmium	TM30/PM14	Bi-annual		<0.03	ug/l	3.75mg/l Cd	IGV	N/a
21/12/2017	BH306C	Total Dissolved Chromium	TM30/PM14	Bi-annual		1.3	ug/l			N/a
21/12/2017	BH306C	Dissolved Copper	TM30/PM14	Bi-annual		<3	ug/l	1500 mg/l Cu	IGV	N/a
21/12/2017	BH306C	Dissolved Lead	TM30/PM14	Bi-annual		<0.4	ug/l	18.75 mg/l Pb		N/a
21/12/2017	BH306C	Dissolved Manganese	TM30/PM14	Bi-annual		4.7	ug/l			N/a
21/12/2017	BH306C	Dissolved Nickel	TM30/PM14	Bi-annual		<0.2	ug/l			N/a
21/12/2017	BH306C	Dissolved Zinc	TM30/PM14	Bi-annual		12.5	ug/l			N/a
21/12/2017	BH306C	Mercury Dissolved by CVAF	TM61/PM38	Bi-annual		0.02	ug/l	0.75mg/l Hg	IGV	N/a
21/12/2017	BH306C	Hexavalent Chromium	TM38/PM0	Bi-annual		<0.006	mg/l		IGV	N/a
21/12/2017	BH306C	Dissolved Oxygen	TM59/PM0	Bi-annual		7	mg/l			N/a
21/12/2017	BH306C	Electrical Conductivity @25C	TM76/PM0	Bi-annual		50052	uS/cm	800mS/cm	IGV	N/a
21/12/2017	BH306C	pH	TM73/PM0	Bi-annual		7.65	pH units			N/a
21/12/2017	BH306C	Redox	TM72/PM0	Bi-annual		-18.05	mV			N/a
21/12/2017	BH306C	GRO (>C4-C8)	TM36/PM12	Bi-annual		<10	ug/l			N/a
21/12/2017	BH306C	GRO (>C8-C12)	TM36/PM12	Bi-annual		<10	ug/l			N/a
21/12/2017	BH306C	GRO (>C4-C12)	TM36/PM12	Bi-annual		<10	ug/l			N/a
21/12/2017	BH306C	EPH (C8-C40)	TM5/PM30	Bi-annual		<10	ug/l			N/a
21/12/2017	BH306C	Naphthalene	TM4/PM30	Bi-annual		<0.1	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306C	Acenaphthylene	TM4/PM30	Bi-annual		<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306C	Acenaphthene	TM4/PM30	Bi-annual		<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306C	Fluorene	TM4/PM30	Bi-annual		<0.014	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306C	Phenanthrene	TM4/PM30	Bi-annual		<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306C	Anthracene	TM4/PM30	Bi-annual		<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306C	Fluoranthene	TM4/PM30	Bi-annual		<0.012	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306C	Pyrene	TM4/PM30	Bi-annual		<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306C	Benzo(a)anthracene	TM4/PM30	Bi-annual		<0.015	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306C	Chrysene	TM4/PM30	Bi-annual		<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306C	Benzo(bk)fluoranthene	TM4/PM30	Bi-annual		<0.018	ug/l	0.075 mg/l	IGV	N/a

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21/12/2017	BH306C	Benzo(a)pyrene	TM4/PM30	Bi-annual		<0.016	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306C	Indeno(123cd)pyrene	TM4/PM30	Bi-annual		<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306C	Dibenzo(ah)anthracene	TM4/PM30	Bi-annual		<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306C	Benzo(ghi)perylene	TM4/PM30	Bi-annual		<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306C	PAH 16 Total	TM4/PM30	Bi-annual		<0.195	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306C	Benzo(b)fluoranthene	TM4/PM30	Bi-annual		<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH306C	Benzo(k)fluoranthene	TM4/PM30	Bi-annual		<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312C	Dissolved Aluminium	TM30/PM14	Bi-annual		53.5	ug/l			N/a
21/12/2017	BH312C	Dissolved Arsenic	TM30/PM14	Bi-annual		<0.9	ug/l	7.5mg/l As	IGV	N/a
21/12/2017	BH312C	Dissolved Cadmium	TM30/PM14	Bi-annual		<0.03	ug/l	3.75mg/l Cd	IGV	N/a
21/12/2017	BH312C	Total Dissolved Chromium	TM30/PM14	Bi-annual		13.7	ug/l			N/a
21/12/2017	BH312C	Dissolved Copper	TM30/PM14	Bi-annual		8	ug/l	1500 mg/l Cu	IGV	N/a
21/12/2017	BH312C	Dissolved Lead	TM30/PM14	Bi-annual		<0.4	ug/l	18.75 mg/l Pb		N/a
21/12/2017	BH312C	Dissolved Manganese	TM30/PM14	Bi-annual		15.6	ug/l			N/a
21/12/2017	BH312C	Dissolved Nickel	TM30/PM14	Bi-annual		10.9	ug/l			N/a
21/12/2017	BH312C	Dissolved Zinc	TM30/PM14	Bi-annual		10.1	ug/l			N/a
21/12/2017	BH312C	Mercury Dissolved by CVAf	TM61/PM38	Bi-annual		<0.01	ug/l	0.75mg/l Hg	IGV	N/a
21/12/2017	BH312C	Hexavalent Chromium	TM38/PM0	Bi-annual		<0.006	mg/l		IGV	N/a
21/12/2017	BH312C	Dissolved Oxygen	TM59/PM0	Bi-annual		8	mg/l			N/a
21/12/2017	BH312C	Electrical Conductivity @25C	TM76/PM0	Bi-annual		48317	uS/cm	800mS/cm	IGV	N/a
21/12/2017	BH312C	pH	TM73/PM0	Bi-annual		8.12	pH units			N/a
21/12/2017	BH312C	Redox	TM72/PM0	Bi-annual		42.49	mV			N/a
21/12/2017	BH312C	GRO (>C4-C8)	TM36/PM12	Bi-annual		<10	ug/l			N/a
21/12/2017	BH312C	GRO (>C8-C12)	TM36/PM12	Bi-annual		<10	ug/l			N/a
21/12/2017	BH312C	GRO (>C4-C12)	TM36/PM12	Bi-annual		<10	ug/l			N/a
21/12/2017	BH312C	EPH (C8-C40)	TM5/PM30	Bi-annual		<10	ug/l			N/a
21/12/2017	BH312C	Naphthalene	TM4/PM30	Bi-annual		<0.1	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312C	Acenaphthylene	TM4/PM30	Bi-annual		<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312C	Acenaphthene	TM4/PM30	Bi-annual		<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312C	Fluorene	TM4/PM30	Bi-annual		<0.014	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312C	Phenanthrene	TM4/PM30	Bi-annual		<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312C	Anthracene	TM4/PM30	Bi-annual		<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312C	Fluoranthene	TM4/PM30	Bi-annual		<0.012	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312C	Pyrene	TM4/PM30	Bi-annual		<0.013	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312C	Benzo(a)anthracene	TM4/PM30	Bi-annual		<0.015	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312C	Chrysene	TM4/PM30	Bi-annual		<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312C	Benzo(bk)fluoranthene	TM4/PM30	Bi-annual		<0.018	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312C	Benzo(a)pyrene	TM4/PM30	Bi-annual		<0.016	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312C	Indeno(123cd)pyrene	TM4/PM30	Bi-annual		<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312C	Dibenzo(ah)anthracene	TM4/PM30	Bi-annual		<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312C	Benzo(ghi)perylene	TM4/PM30	Bi-annual		<0.011	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312C	PAH 16 Total	TM4/PM30	Bi-annual		<0.195	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312C	Benzo(b)fluoranthene	TM4/PM30	Bi-annual		<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH312C	Benzo(k)fluoranthene	TM4/PM30	Bi-annual		<0.01	ug/l	0.075 mg/l	IGV	N/a
21/12/2017	BH310C	Dissolved Aluminium	TM30/PM14	Bi-annual		<1.5	ug/l			N/a
21/12/2017	BH310C	Dissolved Arsenic	TM30/PM14	Bi-annual		<0.9	ug/l	7.5mg/l As	IGV	N/a
21/12/2017	BH310C	Dissolved Cadmium	TM30/PM14	Bi-annual		<0.03	ug/l	3.75mg/l Cd	IGV	N/a
21/12/2017	BH310C	Total Dissolved Chromium	TM30/PM14	Bi-annual		<0.2	ug/l			N/a
21/12/2017	BH310C	Dissolved Copper	TM30/PM14	Bi-annual		<3	ug/l	1500 mg/l Cu	IGV	N/a
21/12/2017	BH310C	Dissolved Lead	TM30/PM14	Bi-annual		<0.4	ug/l	18.75 mg/l Pb		N/a

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21/12/2017	BH310C	Dissolved Manganese	TM30/PM14	Bi-annual	256.8	ug/l		N/a
21/12/2017	BH310C	Dissolved Nickel	TM30/PM14	Bi-annual	<0.2	ug/l		N/a
21/12/2017	BH310C	Dissolved Zinc	TM30/PM14	Bi-annual	<1.5	ug/l		N/a
21/12/2017	BH310C	Mercury Dissolved by CVAf	TM61/PM38	Bi-annual	<0.01	ug/l	0.75mg/l Hg	IGV N/a
21/12/2017	BH310C	Hexavalent Chromium	TM38/PM0	Bi-annual	<0.006	mg/l		IGV N/a
21/12/2017	BH310C	Dissolved Oxygen	TM59/PM0	Bi-annual	5	mg/l		N/a
21/12/2017	BH310C	Electrical Conductivity @25C	TM76/PM0	Bi-annual	48766	uS/cm	800mS/cm	IGV N/a
21/12/2017	BH310C	pH	TM73/PM0	Bi-annual	9.39	pH units		N/a
21/12/2017	BH310C	Redox	TM72/PM0	Bi-annual	-76.11	mV		N/a
21/12/2017	BH310C	GRO (>C4-C8)	TM36/PM12	Bi-annual	<10	ug/l		N/a
21/12/2017	BH310C	GRO (>C8-C12)	TM36/PM12	Bi-annual	<10	ug/l		N/a
21/12/2017	BH310C	GRO (>C4-C12)	TM36/PM12	Bi-annual	<10	ug/l		N/a
21/12/2017	BH310C	EPH (C8-C40)	TM5/PM30	Bi-annual	<10	ug/l		N/a
21/12/2017	BH310C	Naphthalene	TM4/PM30	Bi-annual	<0.1	ug/l	0.075 mg/l	IGV N/a
21/12/2017	BH310C	Acenaphthylene	TM4/PM30	Bi-annual	<0.013	ug/l	0.075 mg/l	IGV N/a
21/12/2017	BH310C	Acenaphthene	TM4/PM30	Bi-annual	<0.013	ug/l	0.075 mg/l	IGV N/a
21/12/2017	BH310C	Fluorene	TM4/PM30	Bi-annual	<0.014	ug/l	0.075 mg/l	IGV N/a
21/12/2017	BH310C	Phenanthrene	TM4/PM30	Bi-annual	<0.011	ug/l	0.075 mg/l	IGV N/a
21/12/2017	BH310C	Anthracene	TM4/PM30	Bi-annual	<0.013	ug/l	0.075 mg/l	IGV N/a
21/12/2017	BH310C	Fluoranthene	TM4/PM30	Bi-annual	<0.012	ug/l	0.075 mg/l	IGV N/a
21/12/2017	BH310C	Pyrene	TM4/PM30	Bi-annual	<0.013	ug/l	0.075 mg/l	IGV N/a
21/12/2017	BH310C	Benzo(a)anthracene	TM4/PM30	Bi-annual	<0.015	ug/l	0.075 mg/l	IGV N/a
21/12/2017	BH310C	Chrysene	TM4/PM30	Bi-annual	<0.011	ug/l	0.075 mg/l	IGV N/a
21/12/2017	BH310C	Benzo(bk)fluoranthene	TM4/PM30	Bi-annual	<0.018	ug/l	0.075 mg/l	IGV N/a
21/12/2017	BH310C	Benzo(a)pyrene	TM4/PM30	Bi-annual	<0.016	ug/l	0.075 mg/l	IGV N/a
21/12/2017	BH310C	Indeno(123cd)pyrene	TM4/PM30	Bi-annual	<0.011	ug/l	0.075 mg/l	IGV N/a
21/12/2017	BH310C	Dibenzo(ah)anthracene	TM4/PM30	Bi-annual	<0.01	ug/l	0.075 mg/l	IGV N/a
21/12/2017	BH310C	Benzo(ghi)perylene	TM4/PM30	Bi-annual	<0.011	ug/l	0.075 mg/l	IGV N/a
21/12/2017	BH310C	PAH 16 Total	TM4/PM30	Bi-annual	<0.195	ug/l	0.075 mg/l	IGV N/a
21/12/2017	BH310C	Benzo(b)fluoranthene	TM4/PM30	Bi-annual	<0.01	ug/l	0.075 mg/l	IGV N/a
21/12/2017	BH310C	Benzo(k)fluoranthene	TM4/PM30	Bi-annual	<0.01	ug/l	0.075 mg/l	IGV N/a
<p>*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.</p>								Groundwater monitoring template
<p>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)</p>								Guidance on the Management of Contaminated Land and Groundwater at EPA Licensed Sites (EPA 2013).
<p>**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)</p>								Groundwater Drinking water Surface water EQS regulations (private supply) Drinking water (public supply) standards GTV's standards

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:	W0289-01	Year	2017
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[Click here to access EPA guidance on Environmental Liabilities and Financial provision](#)

			Commentary
1	ELRA initial agreement status	Not required	N/A
2	ELRA review status	Not required	N/A
3	Amount of Financial Provision cover required as determined by the latest ELRA	Specify	N/A
4	Financial Provision for ELRA status	SELECT	N/A
5	Financial Provision for ELRA - amount of cover	Specify	N/A
6	Financial Provision for ELRA - type	SELECT	N/A
7	Financial provision for ELRA expiry date	Enter expiry date	N/A
8	Closure plan initial agreement status	Closure plan submitted and not agreed by EPA	
9	Closure plan review status	Review required and not completed	
10	Financial Provision for Closure status	Submitted and not agreed by EPA;	
11	Financial Provision for Closure - amount of cover	€20,598,651	
12	Financial Provision for Closure - type		To be confirmed
13	Financial provision for Closure expiry date		N/A

Environmental Management Programme/Continuous Improvement Programme template

Lic No:

W0289-01

Year

2017

Highlighted cells contain dropdown menu click to view		Additional Information	
1	Do you maintain an Environmental Management System (EMS) for the site. If yes, please detail in additional information	Yes	EMS submitted to the EPA on 24/11/2017
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
Energy Efficiency/Utility conservation	The various remediation measures proposed at this time do not incorporate active systems and therefore the proposed remediation solution will have low long-term energy and maintenance requirements.	90	Achieved through consideration during the detailed design stage.	Design Team	Improved Environmental Management Practices
Energy Efficiency/Utility conservation	Pollution control systems are not envisaged for the end-use, aftercare and maintenance stage. Therefore, currently it is expected that there will be no energy requirements for the operation of the remediation solution and no waste materials produced during its operation.	90	The remediation solution will be subject to ongoing visual checks to ensure it remains intact. No ongoing maintenance is anticipated, unless the system becomes damaged for some reason.	Individual	Improved Environmental Management Practices
Materials Handling/Storage/Bunding	Establish an on-site processing facility for slag present on-site.	90	Slag Processing equipment was mobilised to the site in December 2017 with some initial slag processing trials commenced. Slag processing will be ongoing throughout 2018.	Contractor	Installation of infrastructure
Materials Handling/Storage/Bunding	Establish excavation works on site which will involve the breaking out of areas of slag which are currently 'fused' and the use of rock breakers and/or toothed buckets. These activities increase the potential for noise and dust generation.	50	The excavation areas will be planned during the construction period but will have due regard to sensitive receptors at all times and will operate within the requirements of W0289-01 and in accordance with the 'Dust Minimisation Plan' which forms part of the Construction Environmental Management Plan (CEMP).	Contractor	Works Ongoing
Materials Handling/Storage/Bunding	Installation of the PES along the boundary with Cork Harbour will require work in the foreshore area of the Haulbowl East Tip.	40	As of 15th March estimated at 35% complete	Contractor	Remediation of contamination on site
Reduction of emissions to Water	All works in the foreshore will be monitored by the Environmental Clerk of Works.	30	Ongoing - ECoW is present and completing supervision of any works in the foreshore. Currently 4 months completed in a 13 month project programme	ECoW	Improved Environmental Management Practices
Materials Handling/Storage/Bunding	All materials will be sourced as close to the East Tip as is practically possible.	90	Material sourcing completed. IDA Martello Site identified as source.	Contractor	Reduced emissions
Materials Handling/Storage/Bunding	Ensure all materials imported on site and reusable slag material (processed on site) are stored in an appropriate and safe manner to ensure there is no cross contamination and wastage.	30	No issues with material storage to date	ECoW	Reduced emissions
Waste reduction/Raw material usage efficiency	Ensure all staff engage in energy and water usage awareness training.	30	Ongoing - site induction given to all contractors staff. CEMP in place	Contractor	Increased compliance with licence conditions
Waste reduction/Raw material usage efficiency	In accordance with condition 7.1, evaluating resource usage on-site and minimising usage where possible.	30	Ongoing. CEMP in place & regular site meetings.	ECoW & Contractor	Increased compliance with licence conditions

Environmental Management Programme/Continuous Improvement Programme template				Lic No:	W0289-01	Year	2017
Materials Handling/Storage/Bunding	In accordance with Condition 8.5, stockpiles of excavated and recovered waste shall be stored in designated areas, clearly labelled, appropriately segregated and appropriately protected against erosion and dust generation.		30	No issues with material storage to date	Contractor	Reduced emissions	
Materials Handling/Storage/Bunding	Materials encountered during the re-profiling works that are to be removed from the site will be managed at authorised facilities.		30	No waste was transferred off-site in December 2017. The only waste that has been transferred off-site at all to date was 400 litres of waste hydraulic oil which was removed by Enva on 12/02/18.	ECoW & Contractor	Increased compliance with licence conditions	
Materials Handling/Storage/Bunding	Ensure all waste materials leaving the site are treated in an environmentally sound manner by an authorised waste facility. The re-use of processed slag, where possible, as engineering fill for the construction of the PES and within the drainage system.		30	Maintain a register of next destination waste facilities and waste recovery or disposal treatment processes, tonnages, EWC/LoW for waste resources exiting the site.	ECoW & Contractor	Increased compliance with licence conditions	
Materials Handling/Storage/Bunding	This presents an opportunity to minimise the impact from the importation of fill. Please note the opportunity to re-use slag on site is subject to approval from the Agency.	N/a		Any reprocessed slag will be used in the regulation layer below the cap. It is not planned to use this material above cap, in the PES or drainage layer as the material is not considered to be suitable.	ECoW	N/a	
Energy Efficiency/Utility conservation	In the development of on-site construction, management and aftercare works an assessment of cleaner technology solutions which may be suitable for implementation at the site		90	Ongoing: Contractors Site Infrastructure Design currently being finalised. Implementation of Electric Vehicle car charging is under consideration	Contractor & Design Team	Improved Environmental Management Practices	
Energy Efficiency/Utility conservation	Greening the project through implementing measures such as solar panels for showers, small wind turbines for LED lighting etc. will be considered and implemented as much as is feasible.		90	Ongoing: Contractors Site Infrastructure Design currently being finalised. Implementation of Electric Vehicle car charging is under consideration	Contractor & Design Team	Improved Environmental Management Practices	
Waste reduction/Raw material usage efficiency	Implement waste management system on-site and ensure all staff on site are trained and inducted on using the waste management system.		30	Ongoing - site induction given to all contractors staff. CEMP in place	ECoW & Contractor	Increased compliance with licence conditions	
Waste reduction/Raw material usage efficiency	Reduction of on-site waste generation		30	Monitor waste generation on a monthly basis to evaluate progress in minimising waste arisings on site.	ECoW & Contractor	Increased compliance with licence conditions	
Waste reduction/Raw material usage efficiency	Divert waste from landfill.		30	Ensure that all waste exported from site is sent for recovery or pre-treatment.	ECoW & Contractor	Increased compliance with licence conditions	
Groundwater protection	To prevent fugitive leaks from any over ground pipes (compliance with Condition 3.9).		30	Include the inspection of all over ground pipes within the routine inspection audits carried out on site.	ECoW & Contractor	Increased compliance with licence conditions	
Materials Handling/Storage/Bunding	Establish, clearly label and provide safe and permanent access to all on-site sampling and monitoring points and to off-site points.		90	Install sampling and monitoring points and ensure appropriate identification is present at all environmental monitoring points on-site.	ECoW & Contractor	Increased compliance with licence conditions	
Materials Handling/Storage/Bunding	Review monitoring infrastructure present on site, identify wells lost as a result of development works and replace where possible.		30	Carry out a monthly inspection and replace monitoring infrastructure lost in an appropriate timeframe. Ongoing	ECoW	Increased compliance with licence conditions	
Reduction of emissions to Air	Reduce dust levels arisings during the construction phase.		30	Implementation of the Dust Minimisation Plan as part of Construction Environmental Management Plan (CEMP). Currently 4 months completed in a 13 month project programme	ECoW & Contractor	Increased compliance with licence conditions	
Reduction of emissions to Water	Management of surface water.		30	Implementation of the Dust Minimisation Plan as part of Construction Environmental Management Plan (CEMP). Currently 4 months completed in a 13 month project programme	ECoW & Contractor	Increased compliance with licence conditions	
Additional improvements	Maintain compliance with the Environmental Management System and waste licence.		50	EMS submitted to EPA in advance of site works commencing. ECOW present on site for management and implementation of	ECoW	Increased compliance with licence conditions	
Additional improvements	Eliminate nuisance of vermin.		30	Not required to date. ECOW to remain vigilant	ECoW	Increased compliance with licence conditions	
Additional improvements	Ensure all relevant information including operating hours (including when work is ongoing in the tidal area thus requiring an extended working day), environmental management/monitoring, contact details etc. is provided to the public through an appropriate medium.		30	Ensure regular updates to the project website: www.corkcoco.ie/haulbowlme. Ensure noticeboard at the site contains all relevant information – project contact etc.	CCC	Less complaints	
Additional improvements	Ensure facility operations do not give rise to complaints from immediate neighbours.		30	Ongoing maintenance of complaints log. Complaints addressed as they arise. None received during 2017.	CCC	Less complaints	

Noise monitoring summary report	Lic No: W0289-01	Year	2017
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No

Note noise monitoring is required on a quarterly basis for the duration fo the construction works. As the works only commenced in Dec 2017 the first round of monitoring was completed in early 2018. Therefore no reportable noise monitoring to be reported in this AER.

1 Was noise monitoring a licence requirement for the AER period?
If yes please fill in table N1 noise summary below

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](#)

SELECT

Yes

16/11/2017

No

3 Does your site have a noise reduction plan

4 When was the noise reduction plan last updated?

5 Have there been changes relevant to site noise emissions (e.g. plant or operational changes) since the last noise survey?

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 <u>site</u> compliant with noise limits (day/evening/night)?
								SELECT	SELECT		SELECT

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

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

SELECT

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

Any additional comments? (less than 200 words)

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

Additional information	
N/A	None completed to Date
No	N/A
No	N/A

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)	N/A	0.164 MWh	N/A	N/A
Total Energy Generated (MWHrs)	N/A	N/A	N/A	N/A
Total Renewable Energy Generated (N/A)	N/A	N/A	N/A	N/A
Electricity Consumption (MWHrs)	N/A	0.164 MWh	N/A	N/A
Fossil Fuels Consumption:				
Heavy Fuel Oil (m3)	N/A	15.7 m3	N/A	N/A
Light Fuel Oil (m3)	N/A	<1 m3	N/A	N/A
Natural gas (m3)	N/A	N/A	N/A	N/A
Coal/Solid fuel (metric tonnes)	N/A	N/A	N/A	N/A
Peat (metric tonnes)	N/A	N/A	N/A	N/A
Renewable Biomass	N/A	N/A	N/A	N/A
Renewable energy generated on site	N/A	N/A	N/A	N/A

* 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 ³ yr):	Volume used i.e not discharged to environment e.g. released as steam m3/yr	Unaccounted for Water:
Groundwater	N/A	16	N/A	N/A	N/A	N/A	N/A
Surface water	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Public supply	N/A	50.32	N/A	N/A	N/A	N/A	N/A
Recycled water	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	N/A	66.32 m3	N/A	N/A	N/A	N/A	N/A

* 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: W0289-01	Year	2017
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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					

WASTE SUMMARY	Lic No:	W0289-01	Year	2017
SECTION A-PRTR ON SITE WASTE TREATMENT AND WASTE TRANSFERS TAB- TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES		PRTR facility login	dropdown list click to see options	

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

Additional Information

Were any wastes accepted onto your site for recovery or disposal or treatment prior to recovery or disposal within the boundaries of your facility?; (waste generated within your boundaries is to be captured through PRTR reporting)

No	
----	--

If yes please enter details in table 1 below

2 Did your site have any rejected consignments of waste in the current reporting year? If yes please give a brief explanation in the additional information

No	
----	--

3 Was waste accepted onto your site that was generated outside the Republic of Ireland? If yes please state the quantity in tonnes in additional information

No	
----	--

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

Licensed annual tonnage limit for your site (total tonnes/annum)	EWC code	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

N/A	
-----	--

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

N/A	
-----	--

6 Does your facility have relevant nuisance controls in place?

N/A	
-----	--

7 Do you have an odour management system in place for your facility? If no why?

N/A	
-----	--

8 Do you maintain a sludge register on site?

N/A	
-----	--

SECTION D-TO BE COMPLETED BY LANDFILL SITES ONLY

Table 2 Waste type and tonnage-landfill only

WASTE SUMMARY					Lic No:	W0289-01	Year	2017
Waste types permitted for disposal	Authorised/licenced annual intake for disposal (tpa)	Actual intake for disposal in reporting year (tpa)	Remaining licenced capacity at end of reporting year (m3)	Comments				
N/A	N/A	0	0	<p>Note the site is classed as a hazardous waste landfill</p> <p>The following waste related processes are authorised:</p> <ul style="list-style-type: none"> • Re-grading and re-profiling (movement) of waste stockpiles • Excavation and re-deposit of waste • Treatment of waste, e.g. crushing, grading, washing, mixing and stabilising • Construction of perimeter engineered structure to contain waste, including use of waste in construction • Construction of impermeable cap and installation of drainage network • Use of imported inert waste in construction • Maintenance and aftercare activities post-construction <p>Note no authorised intakes are specified for any materials within the Waste Licence, W0289-01.</p>				

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
										ha	ha
Area 1	1960s	2006	No	Private		Closed	No	No	No	9	0

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
Yes	No	No	N/a	Yes	Yes	Yes		

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

Table 5 Capping-Landfill only

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
ha	ha					
9	0	0	0	0	9 none in 2017	Capping of site shall commence in 2018. Full details will be provided in 2018 AER.

* please note this includes daily cover area

Table 6 Leachate-Landfill only

9 Is leachate from your site treated in a Waste Water Treatment Plant?
 10 Is leachate released to surface water? If yes please complete leachate mass load information below

N/A
N/A

WASTE SUMMARY Lic No: W0289-01 Year 2017

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
0	N/A	N/A	N/A	N/A	N/A	N/A	During the excavation of the PES, if any tidal inundation has to be pumped from the works area, it will discharge to a settlement pond or alternative system via a de-watering area. Any discharge from the settlement system, after an appropriate settlement time, will be dispersed via infiltration trenches/pits into the waste body.

Please ensure that all information reported in the landfill gas section is consistent with the Landfill Gas Survey submitted in conjunction with PRIR 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
0	N/A	N/A	N/A	

| PRTR# : W0289 | Facility Name : The East Tip | Filename : W0289_2017_A01.xls
 | Return Year : 2017 |

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[Guidance to completing the PRTR workbook](#)

PRTR Returns Workbook

Version 1.1.19

REFERENCE YEAR	2017
-----------------------	------

1. FACILITY IDENTIFICATION

Parent Company Name	Minister for Agriculture, Food and the Marine
Facility Name	The East Tip
PRTR Identification Number	W0289
Licence Number	W0289-01

Classes of Activity

No.	class_name
-	Refer to PRTR class activities below

Address 1	Haulbowline Island
Address 2	
Address 3	
Address 4	
Country	Cork
Coordinates of Location	Ireland
River Basin District	-8.29458939151.84079239
NACE Code	IESW
Main Economic Activity	3900
AER Returns Contact Name	Remediation activities and other waste management services
AER Returns Contact Email Address	Darragh Kingston
AER Returns Contact Position	Darragh.Kingston@CorkCoCo.ie
AER Returns Contact Telephone Number	Environmental Clerk of Works
AER Returns Contact Mobile Phone Number	(021) 4369688
AER Returns Contact Fax Number	(085) 2542569
Production Volume	
Production Volume Units	0.0
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	27
User Feedback/Comments	27 Staff members are reported based on Supervisors Reports for December. This number comprises CCC Site team, Contractor and Subcontractor site teams.
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
50.1	General

3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)

Is it applicable?	
Have you been granted an exemption ?	
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

4. WASTE IMPORTED/ACCEPTED ONTO SITE

[Guidance on waste imported/accepted onto site](#)

Do you import/accept waste onto your site for on-site treatment (either recovery or disposal activities) ?	
--	--

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

4.1 RELEASES TO AIR

[Link to previous years emissions data](#)

| PRTR#: W0289 | Facility Name : The East Tip | Filename : W0289_2017_A01.xls | Return Year : 2017 |

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SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

POLLUTANT		METHOD			Please enter all quantities in this section in KGs			
No. Annex II	Name	M/C/E	Method Used		Emission Point 1	QUANTITY		
			Method Code	Designation or Description		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 B : REMAINING PRTR POLLUTANTS

POLLUTANT		METHOD			Please enter all quantities in this section in KGs			
No. Annex II	Name	M/C/E	Method Used		Emission Point 1	QUANTITY		
			Method Code	Designation or Description		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)

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

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

Additional Data Requested from Landfill operators

For the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide summary data on landfill gas (Methane) flared or utilised on their facilities to accompany the figures for total methane generated. Operators should only report their Net methane (CH4) emission to the environment under T(total) KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:

Landfill:		The East Tip			
Please enter summary data on the quantities of methane flared and / or utilised		M/C/E	Method Used		Facility Total Capacity m3 per hour
T (Total) kg/Year			Method Code	Designation or Description	
Total estimated methane generation (as per site model)	0.0				N/A
Methane flared	0.0				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)	0.0				N/A

4.2 RELEASES TO WATERS

[Link to previous years emissions data](#)

| PRTR# : W0289 | Facility Name : The East Tip | Filename : W0289_2017_A01.xls | Return Year : 2017 |

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SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

Data on ambient monitoring of storm/surface water or groundwater, conducted as part of your licence requirements, should NOT be submitted under AER / PRTR Reporting as this only concerns Releases from your facility

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

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

SECTION B : REMAINING PRTR POLLUTANTS

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

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

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

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

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

4.3 RELEASES TO WASTEWATER OR SEWER

[Link to previous years emissions data](#)

| PRTR# : W0289 | Facility Name : The East Tip | Filename : W0289_2017_A01.xls | Return Year : 2

29/03/2018 10:29

SECTION A : PRTR POLLUTANTS

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
No. Annex II	Name	M/C/E	Method Used		Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
			Method Code	Designation or Description	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 B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
Pollutant No.	Name	M/C/E	Method Used		Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
			Method Code	Designation or Description	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

4.4 RELEASES TO LAND

[Link to previous years emissions data](#)

| PRTR# : W0289 | Facility Name : The East Tip | Filename : W0289_2017_A01.xls | Return Year : 2017 |

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SECTION A : PRTR POLLUTANTS

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

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

SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

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

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

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

| PRTR# : W0289 | Facility Name : The East Tip | Filename : W0289_2017_A01.xls | Return Year : 2017 |

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Please enter all quantities on this sheet in Tonnes

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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	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					

* Select a row by double-clicking the Description of Waste then click the delete button

[Link to previous years waste data](#)

[Link to previous years waste summary data & percentage change](#)

[Link to Waste Guidance](#)