Facility Information Summary						
AER Reporting Year	2017					
Licence Register Number	W0129-02		•			
Name of site	IMSL Hollywood					
Site Location	Hollywood Great, Nag	s Head, Na				
NACE Code	3821			-		
Class/Classes of Activity	As W0129-02: Disposa	l Classes 1,	5, 13; Recovery Classes 3, 4, 13			
National Grid Reference (6E, 6 N)	E315723 N258073					
	waste is accepted, and is subject to strict Waste Acceptance Procedures as follows: (i) Level 1 Basic Characterisation Testing, (ii) Level 2 "1 in 100" Compliance Testing , and (iii) Level 3 On-Site Verification Testing.					
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	The licence was transferred to IMSL in June 2017. The has been a 65% decrease in waste acceptance fr to 2017 due to market demand and changes in business ownership.					
infrastructural changes, environmental performance which was measured during the reporting year and an overview of	In relation to environmental monitoring during the reporting year, there were a number of minor breaches o trigger levels, however these were no reported to the agency as incidents as they were not thought to be as a result of site activities.					
compliance with your licence listing all exceedances of licence limits (where applicable) and what they relate to e.g. air, water poice	There was one modera relating to the accepta	ate incident nce of non	reported to the Agency in 2017 hazardous and hazardous mater	as detailed in the Complaints-Incidents tab ial into the site.		
	The site maintains an e were undertaken durir	environmer ng the repo	tal management system. No sigr rting year.	ificant infrastructure/development works		

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 requirement	S
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Kerstie Flanagan	
Signature	
Environmental Consultant	
(or nominated, suitably qualified and experienced deputy)	

29.03.18



Please note an interpretation of results is still required. This should be entered in the additional information/comments boxes within the templates. Please size these boxes appropriately to fit your interpretation, if additional space is required please include an appendix to the AER template and merge it as part of the AER PDF document. The excel template should have all cells sized appropriately so that all text is readable before it is converted to PDF document.

AIR-sumn	mary template	Lic No:	W0129-02	Year	2017
Answer all o Does you 1 reporting y	questions and complete all tables where relevant our site have licensed air emissions? If yes please complete table A1 and A2 below for the current g year and answer further questions. If you do not have licenced emissions and do not complete a solvent management plan (table A4 and A5) you <u>do not</u> need to complete the tables	No	Additional in Ambient dust monitoring was co locations twice during the repor breaches of the dust deposition	formation onducted at 4 monitoring rting year - there were no ELV.	
Pe	eriodic/Non-Continuous Monitoring				
2 Are there a	any results in breach of licence requirements? If yes please provide brief details in the comment section of				

TableA1 below ³ Was all monitoring carried out in accordance with EPA guidance
note AG2 and using the basic air monitoring checklist? <u>
 Basic air</u>
<u>
 monitoring</u>
<u>
 checklist</u>

the comment section of		
	SELECT	
AGN2	SELECT	

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

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

Continuous Monitoring 4 Does your site carry out continuous air emissions monitoring? SELECT

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

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

SELECT	
SELECT	

Do you have a proactive service agreement for each piece of continuous monitoring equipment?

AIR-	summary template	Lic No:	W0129-02	Year	2017	
7						
	Did your site experience any abatement system bypasses? If yes please detail them in table A3 below	SELECT				

Table A2: Summary of average emissions -continuous monitoring

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

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

Table A3: Abatement system bypass reporting table

	1 11				
Date*	Duration** (hours)	Location	Reason for bypass	Impact magnitude	Corrective action

Bypass protocol

* this should include all dates that an abatement system bypass occurred

** an accurate record of time bypass beginning and end should be logged on site and maintained for future Agency inspections please refer to bypass protocol link

Solvent use and management on site

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

Table A4: Solve Total VOC Emi	ent Management Pla ssion limit value	n Summary	<u>Solvent</u> <u>regulations</u>	ventPlease refer to linked solvent regula <u>ulations</u> complete table 5 and 6		
Reporting year	Total solvent input on site (kg)	Total VOC emissions to Air from entire site (direct and fugitive)	Total VOC emissions as %of solvent input	Total Emission Limit Value (ELV) in licence or any revision thereof	Compliance	
					SELECT	
					SELECT	



	AIR-summary t	emplate				Lic No:	W0129-02		Year	2017	
	Table A5:	Solvent Mass Baland	ce summary								
		(I) Inputs (kg)			(0)	Outputs (kg)					
	Solvent	(I) Inputs (kg)	Organic solvent emission in waste	Solvents lost in water (kg)	Collected waste solvent (kg)	Fugitive Organic Solvent (kg)	Solvent released in other ways e.g. by-	Solvents destroyed onsite through	Total emission of Solvent to air (kg)		
ĺ											
•								Total			

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)		Lic No:	W0129-02		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 licenced emissions you <u>only</u> need to complete table W1 and or W2 for storm water analysis and visual inspections	Yes	There are 7 No. lice SWD2 to SWD7 wer surface water pump pumping activities I observed at these le landfill areas. The n verified during each	nsed Surface Water Discharge point e previously surface water discharg sassociated with quarrying oper ave been suspended; therefore an ocations is sourced from surface wa norm is that these locations are dry, surface water sampling event.	ts: SWD-1 to SWD-7. te points from ations. The water y water/flow now ter run-off from non- however this is			
Was it a requirement of your licence to carry out visual inspections on any surface water 2 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	Yes						
Table W1 Storm water monitoring					-		
Location Location Licenced Monitoring	ELV or trigger level in licence	Licence		Unit of	Compliant with		

Location reference	Location relative to site activities	PRTR Parameter	Licenced Parameter	Monitoring date	level in licence or any revision thereof*	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Comments
SW-1	upstream		Ammoniacal Nitrogen		N/A	N/A	0.12	mg/l NH4-N	yes	
SW-1	upstream		Calcium		N/A	N/A	122.60	mg/l	yes	
SW-1	upstream		Chemical Oxygen		N/A	N/A	19.5	mg/I	yes	
SW-1	unstream		Chloride		N/A	N/A	37.5	mg/l	VPS	
SW-1	upstream		Conductivity		N/A	N/A	0.6	mS/cm	Ves	
SW-1	upstream		Dissolved Oxygen		N/A	N/A	9.0	mg/l	ves	One exceedance
SW-1	upstream		Magnesium		N/A	N/A	14.1	mg/l	ves	of Total
SW-1	upstream		Manganese		N/A	N/A	0.00	mg/l	ves	Suspended Solids
SW-1	upstream		Orthophosphate		N/A	N/A	0.26	mg/l	yes	noted in SW-1
SW-2	upstream		Phosphorus		N/A	N/A	0.08	mg/l	ves	during the
SW-1	upstream		рН		N/A	N/A	8.31	pH	ves	reporting year.
SW-1	upstream		Sodium		N/A	N/A	23.10	mg/I	yes	
SW-1	upstream		Sulphate		N/A	N/A	118.10	mg/l	yes	
SW-1	upstream		Temperature		N/A	N/A	11.05	oC	ves	
SW-1	upstream		Total Alkalinity		N/A	N/A	268.00	mg/I	yes	
SW-1	upstream		Total Suspended Solids		N/A	N/A	86.50	mg/l	yes	
SW-2	downstream		Ammoniacal Nitrogen		N/A	N/A	0.05	mg/l NH4-N	yes	
SW-2	downstream		Calcium		N/A	N/A	148.50	mg/l	yes	
SW-2	downstream		Chemical Oxygen		N/A	N/A	22.50	mg/l	yes	
SW-2	downstream		Chloride		N/A	N/A	33.95	mg/l	yes	
SW-2	downstream		Conductivity		N/A	N/A	0.67	mS/cm	ves	
SW-2	downstream		Dissolved Oxygen		N/A	N/A	9.50	mg/l	yes	Two exceedances
SW-2	downstream		Magnesium		N/A	N/A	10.90	mg/l	yes	of Total
SW-2	downstream		Manganese		N/A	N/A	0.02	mg/l	yes	Suspended Solids
SW-2	downstream		Orthophosphate/		N/A	N/A	0.32	mg/l	yes	were noted in SW-
SW-3	downstream		Phosphorus		N/A	N/A	3.81	mg/l	yes	2 during the
SW-2	downstream		рН		N/A	N/A	8.61	pH	yes	reporting year.
SW-2	downstream		Sodium		N/A	N/A	16.70	mg/l	yes	
SW-2	downstream		Sulphate		N/A	N/A	179.00	mg/l	yes	
SW-2	downstream		Temperature		N/A	N/A	11.05	oC	yes	
SW-2	downstream		Total Alkalinity		N/A	N/A	290.00	mg/l	yes	
SW-2	downstream		Total Suspended Solids		N/A	N/A	785.50	mg/I	yes	

AER Monito	ring returns su	mmary template-WA	ATER/WASTEW/	ATER(SEWER)		Lic No:	W0129-02		Year	2017
-										
	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
SWD-1	Weekly	No Contamination	SELECT		
SWD-2	Weekly	No Contamination	SELECT		
SWD-3	Weekly	No Contamination	SELECT		
SWD-4	Weekly	No Contamination	SELECT		
SWD-5	Weekly	No Contamination	SELECT		
SWD-6	Weekly	No Contamination	SELECT		
SWD-7	Weekly	No Contamination	SELECT		
SW-1	Weekly	No Contamination	SELECT		
SW-2	Weekly	No Contamination	SELECT		

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

3	Was there any result in breach of licence requirements? If y comment section of Table W3	es please provide bri below	ief details in the	SELECT	Additional information
	Was all monitoring carried out in accordance with EPA				
	guidance and checklists for Quality of Aqueous Monitoring	External /Internal			
	Data Reported to the EPA? If no please detail what areas	Lab Quality	Assessment of		
4	require improvement in additional information box	checklist	results checklist	SELECT	

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 therof ^{Note 2}	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Method of analysis	Procedural reference source	Procedural reference standard number	Annual mass load (kg)	Comments
	SELECT	SELECT	SELECT		SELECT		SELECT		SELECT	SELECT	SELECT	SELECT			
Note 1: Volume	te 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

SELECT

SELECT

SELECT

Continuous monitoring

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

Additional Information

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

6 Did continuous monitoring equipment experience downtime? If yes please record downtime in table W4 below Do you have a proactive service contract for each piece of continuous monitoring equipment on 7 site?

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

Table W4: Summary of average emissions -continuous monitoring

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

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

Table W5: Abatement system bypass reporting table

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

AER Monitor	ing returns su	mmary template-W/	ATER/WASTEW	ATER(SEWER)	Lic No:	W0129-02	Year	2017		
					SELECT					

*Measures taken or proposed to reduce or limit bypass frequency

Bund/Pipeline testing template Lic No:	W0129-02		Year 2017	
Bund testing dropdown menu click to see options		Additional information	т	
		Duad testian is stinulated in W0120		
		03: however fuel is no longer stored		
		in the discel tanks in the hunded		
Are you required by your licence to undertake integrity testing on bunds and containment structures 2 if yes please fill out table 81 below listing all new bunds and		area on site (the plant items which		
The your requires on site in addition to all bunds which failed the integrity test-all bunding structures which failed including mobile bunds and structures and the including mobile bunds and the integrity test-all bunding structures which failed including mobile bunds and the integrity test-all bunding structures which failed including mobile bunds and the integrity test-all bunding structures which failed including mobile bunds and the integrity test-all bunding structures which failed including mobile bunds and the integrity test-all bunding structures which failed including mobile bunds and the integrity test-all bunding structures which failed including mobile bunds and the integrity test-all bunding structures which failed including mobile bunds and the integrity test-all bunding structures which failed including mobile bunds and the integrity test-all bunding structures which failed including mobile bunds and the integrity test-all bunding structures which failed including mobile bunds and the integrity test-all bunding structures which failed including mobile bunds and the integrity test-all bunding structures and test-all bunding str		required diesel are no longer on		
the table below, clease include all bunds outside the licenced testing period (mobile bunds and chemstore included)		site) Bund testing has therefore		
		not been required (diesel tanks are		
		empty). The only diesel currently		
		stored on site is in the self-		
		contained mobile fuel bowser which		
1	Yes	is stored in the garage building.		
2 Please provide integrity testing frequency period	SELECT			
Does the site maintain a register of bunds, underground pipelines (including storm water and foul). Tanks, sumos and containers? (containers refers to			1	
3 "Chemstore" type units and mobile bunds)	SELECT			
4 How many bunds are on site?			1	
5 How many of these bunds have been tested within the required test schedule?				
6 How many mobile bunds are on site?			1	
7 Are the mobile bunds included in the bund test schedule?	SELECT		1	
8 How many of these mobile bunds have been tested within the required test schedule?				
9 How many sumps on site are included in the integrity test schedule?				
10 How many of these sumps are integrity tested within the test schedule?				
Please list any sump integrity failures in table B1			-	
11 Do all sumps and chambers have high level liquid alarms?	SELECT		1	
12 If yes to Q11 are these failsafe systems included in a maintenance and testing programme?	SELECT		1	
13 Is the Fire Water Retention Pond included in your integrity test programme?	SELECT		1	
Table Rds Common debills of board (constrained structure intensity start)				

														Results of
									Integrity reports					retest(if in
Bund/Containment									maintained on		Integrity test failure		Scheduled date	current
structure ID	Туре	Specify Other type	Product containment	Actual capacity	Capacity required*	Type of integrity test	Other test type	Test date	site?	Results of test	explanation <50 words	Corrective action taken	for retest	reporting year)
	SELECT					SELECT			SELECT	SELECT		SELECT		
	SELECT					SELECT			SELECT	SELECT		SELECT		
* Capacity required should cor	nply with 25% or 110% containmen	t rule as detailed in your licence					Commentary							
Has integrity testing b	een carried out in accorda	ince with licence requirements and	l are all structures tested in					T						
15 line with BS8007/EPA	i line with BS8007/EPA Guidance? bunding and storage guidelines							1						
16 Are channels/transfer	systems to remote contai	nment systems tested?	SELECT											

SELECT

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

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 1 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)

SELECT	
SELECT	

Table	B2: Summary details of p	ipeline/underground structures in	tegrity 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

Year

		Comments	
Are you required to carry out groundwater monitoring as part of your licence requirements?	yes		Please provide an interpretation of groundwater monitoring data in
2 Are you required to carry out soil monitoring as part of your licence requirements?	no		the interpretation box below or if you require additional space please
Do you extract groundwater for use on site? If yes please specify use in comment			include a groundwater/contaminated land monitoring results
section	no		interpretation as an additional section in this AER
Do monitoring results show that groundwater generic assessment criteria such as GTVs or IGVs are exceeded or is 4 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. template_	no		Groundwater is monitored on a quarterly basis and a quarterly report submitted to the Agency. Results were generally in conformance with relevant limit values and the EPA trigger levels set for the site. There were a number of breaches of trigger levels/ELVs reported to the Agency as minor incidents during the reporting year (detailed in 'Incidents' tab). Exceedances relative to trigger levels/ELVs are thought to be largely related to external sources, and not as a result of the
5 Is the contamination related to operations at the facility (either current and/or historic)	N/A		operation of the subject facility
6 Have actions been taken to address contamination issues? If yes please summarise			
remediation strategies proposed/undertaken for the site	N/A		
7 Please specify the proposed time frame for the remediation strategy	N/A		
8 Is there a licence condition to carry out/update ELRA for the site?	N/A		
9 Has any type of risk assessment been carried out for the site?	N/A		
10 Has a Conceptual Site Model been developed for the site?	N/A		
11 Have potential receptors been identified on and off site?	N/A		
12 Is there evidence that contamination is migrating offsite?	N/A		

W0129-02

Table 1: Up gradient 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
16/03/17 20/06/17 05/09/17 30/11/17	BH-5	Ammoniacal Nitrogen	Lab analysis	Quarterly	0.1	0.1	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-5	Arsenic	Lab analysis	Quarterly	0.0025	0.0025	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-5	Barium	Lab analysis	Quarterly	0.007	0.007	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-5	Calcium	Lab analysis	Quarterly	81	81	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-5	Chloride	Lab analysis	Quarterly	21.5	21.5	mg/l	EPA Trigger Levels for W0129-02	75	No

Groundwa	ater/Soil n	nonitoring te	emplate		Lic No:	W0129-02		Year	2017	
16/03/17										
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-5	Colour	Field analysis	Quarterly	Clear	Clear	N/A	W0129-02	N/A	N/A
16/03/17										
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-5	Conductivity	Field analysis	Quarterly	0.56	0.56	mS/cm	W0129-02	1	No
16/03/17	-	,								
20/06/17								FPA Trigger		
05/09/17								Levels for		
30/11/17	BH-5	Cvanide	Lah analysis	Quarterly	0.01	0.01	mg/l	W0129-02	N/A	No
16/03/17	5115	Gydnide	Lab analysis	quarterry	0.01	0101			,//	
20/06/17								FPA Trigger		
05/00/17		Discolved						Levels for		
20/11/17		Owigon	Lab analysis	Quartarly	6	6	mg/I	W0120 02	NI/A	No
16/02/17	вп-э	Oxygen	Lab analysis	Quarterly	U	U	iiig/i	W0129-02	N/A	INU
20/06/17								EDA Trigger		
20/00/17								Lovols for		
05/09/17	DU 5	la	Field control	Quartarly	0.00	0.02	ma //	Levels for	N/ / A	Ne
30/11/1/	BH-2	iron	Field analysis	Quarteriy	0.02	0.02	mg/1	W0129-02	N/A	INU
10/03/17										
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-5	Manganese	Field analysis	Quarterly	0.22	0.22	mg/l	W0129-02	N/A	No
16/03/17										
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-5	Odour	Field analysis	Quarterly	#VALUE!	0	N/A	W0129-02	N/A	N/A
16/03/17										
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-5	рН	Lab analysis	Quarterly	7.1	7.1	pH	W0129-02	6 <ph<9< td=""><td>No</td></ph<9<>	No
16/03/17										
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-5	Phenols, Total	Lab analysis	Quarterly	0.1	0.1	mg/l	W0129-02	0.1	No
16/03/17										
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-5	Potassium	Lab analysis	Quarterly	1.3	1.3	mg/l	W0129-02	N/A	No
16/03/17										
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-5	Sodium	Lab analysis	Quarterly	24.5	24.5	mg/l	W0129-02	80	No
16/03/17				1						
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-5	Sulphate	Field analysis	Quarterly	46.1	46.1	mg/l	W0129-02	150	No
16/03/17				1						
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-5	Temperature	Lab analysis	Quarterly	10.4	10.4	oC	W0129-02	N/A	No
16/03/17				1 .				1		
20/06/17								EPA Trigger		
05/09/17		Total Organic						Levels for		
30/11/17	BH-5	Carbon	Lab analysis	Quarterly	2	2	mg/l	W0129-02	50	No
,, -,					-	-	• بن		50	-
16/03/17		1		1	1	1				
16/03/17								EPA Trigger		
16/03/17		Total Oxidized						EPA Trigger		

Groundwa	ater/Soil	monitoring te	emplate		Lic No:	W0129-02	Year	2017	2017		
16/03/17								50.4 - ·			
								EPA Trigger			
	BH-5	Boron	Lab analysis	Annually	0.012	0.012	mg/l	W0129-02	N/A	No	
16/03/17				,							
								EPA Trigger			
	RH-5	Cadmium	Lab analysis	Annually	0.0005	0.0005	mg/l	Levels for	0.004	No	
16/03/17	DII-3	Caumum	Lab analysis	Annually	0.0005	0.0005	iiig/i	W0125-02	0.004	NO	
								EPA Trigger			
	DU 5	Characterization Table	tak suskuts	A	0.0015	0.0015		Levels for		N -	
16/03/17	BH-2	Chromium, Totai	Lab analysis	Annually	0.0015	0.0015	mg/I	W0129-02	N/A	NO	
.,,								EPA Trigger			
		Coliforms,			_	_	6 /1 1	Levels for			
16/03/17	BH-5	Faecal	Lab analysis	Annually	0	0	ctus/100ml	W0129-02	N/A	No	
_ 3, 3 3, 1 /								EPA Trigger			
					1			Levels for			
16/02/17	BH-5	Coliforms, Total	Lab analysis	Annually	0	0	cfus/100ml	W0129-02	N/A	No	
10/03/17								EPA Trigger			
								Levels for			
16/02/47	BH-5	Copper	Lab analysis	Annually	0.007	0.007	mg/l	W0129-02	0.5	No	
16/03/17								EPA Trigger			
								Levels for			
	BH-5	Fluoride	Lab analysis	Annually	0.3	0.3	mg/l	W0129-02	N/A	No	
16/03/17								EPA Trigger			
								Levels for			
	BH-5	Lead	Lab analysis	Annually	0.005	0.005	mg/l	W0129-02	N/A	No	
16/03/17								EDA Triggor			
		List I and II						Levels for			
	BH-5	Substances	Lab analysis	Annually	0.00001	0.00001	mg/l	W0129-02	N/A	No	
16/03/17								EDA Triana			
								Levels for			
	BH-5	Magnesium	Lab analysis	Annually	6.8	6.8	mg/l	W0129-02	N/A	No	
16/03/17								504 7 1			
								EPA Trigger			
	BH-5	Mercury	Lab analysis	Annually	0.001	0.001	mg/l	W0129-02	N/A	No	
16/03/17					1						
		Orthonhosphata						EPA Trigger			
	BH-5	s	Lab analysis	Annually	0.03	0.03	mg/l	W0129-02	N/A	No	
16/03/17			•								
								EPA Trigger			
	BH-5	PAHs (Total 17)	Lab analysis	Annually	0.000295	0.000295	mg/l	W0129-02	N/A	No	
16/03/17			,515	,							
		Dham I						EPA Trigger			
	BH-5	Phosphorus, Total	Lab analysis	Annually	1,724	1.724	mg/l	Levels for W0129-02	N/A	No	
16/03/17	5.15		Las anarysis		2.// 67	1.7 67			.475		
								EPA Trigger			
	RH-5	Total Solids	Lah analysis	Annually	384	284	mg/l	Levels for	N/A	No	
	01-0	i otal Solius	Lab allalysis	contructiny	J04	J04	····8/	VV0129-02	N/A	110	

Groundw	ater/Soil n	nonitoring to	emplate		Lic No:	W0129-02			Year 2017		
16/03/17											
								EPA Trigger			
	DU 5	7	Lab an abusta	A	0.1.12	0.442	/l	Levels for	N1/A	N	
10/02/17	BH-5	Zinc	Lab analysis	Annually	0.143	0.143	mg/I	W0129-02	N/A	NO	
16/03/17											
20/06/17		Ammoniacal						EPA Trigger			
30/11/17	BH-8A	Nitrogen	Lab analysis	Quarterly	0.05	0.025	mg/l	W/0129-02	N/A	No	
16/03/17	DIFOA	Nitrogen	Lab analysis	Quarterly	0.05	0.035	iiig/i	W0125-02	N/A	NO	
20/06/17								FPA Trigger			
05/09/17								Levels for			
30/11/17	BH-8A	Arsenic	Lab analysis	Quarterly	0.0039	0.00285	mg/l	W0129-02	N/A	No	
16/03/17	-		,				5,		,	-	
20/06/17								EPA Trigger			
05/09/17				1				Levels for			
30/11/17	BH-8A	Barium	Lab analysis	Quarterly	0.012	0.00925	mg/l	W0129-02	N/A	No	
16/03/17				1		1					
20/06/17		1						EPA Trigger			
05/09/17		1						Levels for			
30/11/17	BH-8A	Calcium	Lab analysis	Quarterly	108.7	106.875	mg/l	W0129-02	N/A	No	
16/03/17											
20/06/17		1						EPA Trigger			
05/09/17	DUL OA	Chierrinte	Lab are built	Quantante	25.0	22.4		Levels for	75	N	
30/11/17	BH-8A	Chloride	Lab analysis	Quarterly	35.8	32.4	mg/I	W0129-02	/5	No	
16/03/17											
20/06/17								EPA Trigger			
30/11/17	BH-8A	Colour	Field analysis	Quarterly	Clear	Clear	N/A	W/0129-02	N/A	N/A	
16/03/17	DII-OA	Coloui	FIEIU allalysis	Quarterly	Clear	Clear	N/A	VV0129-02	IN/A	N/A	
20/06/17								FPA Trigger			
05/09/17								Levels for			
30/11/17	BH-8A	Conductivity	Field analysis	Quarterly	0.64	0.56125	mS/cm	W0129-02	1	No	
16/03/17	-			,			-, -				
20/06/17								EPA Trigger			
05/09/17								Levels for			
30/11/17	BH-8A	Cyanide	Lab analysis	Quarterly	0.01	0.01	mg/l	W0129-02	N/A	No	
16/03/17											
20/06/17								EPA Trigger			
05/09/17		Dissolved						Levels for			
30/11/17	BH-8A	Oxygen	Lab analysis	Quarterly	8	6.75	mg/l	W0129-02	N/A	No	
16/03/17		1						594 7			
20/06/17				1				EPA Trigger			
05/09/1/		Iron	Field analysis	Quartarly	0.03	0.02		Levels for	N/A	Na	
50/11/1/ 16/02/17	вп-8А	iron	Field analysis	Quarteriy	0.02	0.02	mg/i	vv0129-02	IN/A	INO	
20/06/17				1				FPA Trigger			
05/09/17		1						Levels for			
30/11/17	BH-8A	Level, Water	Lab analysis	Quarterly	106.02	104.5475	mOD	W0129-02	N/A	No	
16/03/17	511 611	2000,00000	200 0101900	quarterij	100.02	10.00.00			,		
20/06/17		1						EPA Trigger			
05/09/17				1				Levels for			
30/11/17	BH-8A	Manganese	Field analysis	Quarterly	0.002	0.002	mg/l	W0129-02	N/A	No	
16/03/17	-	J	1	1 ,		1	<u>,</u>				
20/06/17				1				EPA Trigger			
05/09/17		1						Levels for			
30/11/17	BH-8A	Odour	Field analysis	Quarterly	None	None	N/A	W0129-02	N/A	N/A	
16/03/17					1						
20/06/17		1						EPA Trigger			
05/09/17				1				Levels for			
30/11/17	BH-8A	рН	Lab analysis	Quarterly	7.9	7.55	рН	W0129-02	6 <ph<9< td=""><td>No</td></ph<9<>	No	

Groundw	ater/Soil r	monitoring te	emplate		Lic No:	W0129-02		Year	2017	
16/03/17										
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-8A	Phenols, Total	Lab analysis	Quarterly	0.1	0.1	mg/l	W0129-02	0.1	No
16/03/17										
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-8A	Potassium	Lab analysis	Quarterly	2.3	2.175	mg/l	W0129-02	N/A	No
16/03/17										
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-8A	Sodium	Lab analysis	Quarterly	12.6	11.725	mg/l	W0129-02	80	No
16/03/17										
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-8A	Sulphate	Field analysis	Quarterly	17.6	16.725	mg/l	W0129-02	150	No
16/03/17										
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-8A	Temperature	Lab analysis	Quarterly	13.8	12.15	oC	W0129-02	N/A	No
16/03/17	-	- p		,		-				-
20/06/17								EPA Trigger		
05/09/17		Total Organic						Levels for		
30/11/17	BH-8A	Carbon	Lab analysis	Quarterly	2	2	mg/l	W0129-02	50	No
16/03/17				,	-	-				
10,00,11								FPA Trigger		
		Total Oxidized						Levels for		
	BH-8A	Nitrogen	Lab analysis	Annually	12.1	9.85	mø/l	W0129-02	N/A	No
16/03/17	DITOR	Hittogen	200 01019515	Announy	12.1	5.05		W0125 02	11/15	110
10/03/17								FPA Trigger		
								Levels for		
	BH-84	Boron	Lab analysis	Annually	0.012	0.012	mg/l	W/0129-02	N/A	No
16/03/17	DIFOR	501011	Lub analysis	Annually	0.012	0.012	118/1	W0125-02	IN/M	NO
10/03/17								FPA Trigger		
								Levels for		
	BH-84	Cadmium	Lah analysis	Annually	0.0005	0.0005	ma/l	W0129-02	0.004	No
16/03/17	DIFOA	Caumun	200 01019315	Annually	0.0005	0.0003	1118/1	W0125-02	0.004	NO
10/03/17								FPA Trigger		
								Lovols for		
		Chromium Total	Lab analysis	Annually	0.0015	0.0015	ma/l	W0120 02	NI/A	No
16/03/17	ση-δΑ	chromium, rotal	Lau aildiysis	Annually	0.0015	0.0015	ilig/i	VV0129-02	IN/A	INO
10/03/17								EDA Triago		
		Coliforna						EPA Trigger		
	DUL OA	Conforms,	tale an alcul				-f/100l	Levels for		Ne
10/02/47	BH-8A	Faecal	Lab analysis	Annually	U	U	ctus/100ml	W0129-02	N/A	NO
10/03/17								EDA Tologo		
								EPA Trigger		
							6 (100)	Levels for		
4.6 /00 /47	BH-8A	Coliforms, Total	Lab analysis	Annually	0	0	ctus/100ml	W0129-02	N/A	No
16/03/17										
								EPA Trigger		
								Levels for		
	BH-8A	Copper	Lab analysis	Annually	0.007	0.007	mg/l	W0129-02	0.5	No
16/03/17										
								EPA Trigger		
								Levels for		
	BH-8A	Fluoride	Lab analysis	Annually	0.3	0.3	mg/l	W0129-02	N/A	No
16/03/17										
								EPA Trigger		
								Levels for		
	BH-8A	Lead	Lab analysis	Annually	0.005	0.005	mg/l	W0129-02	N/A	No

Groundw	ater/Soil	monitoring te	emplate		Lic No:	W0129-02		Year	2017	
16/03/17								594 5 1		
		List Lond II						EPA Trigger		
	BH-8A	Substances	Lab analysis	Annually	0.01	0.01	mg/l	W0129-02	N/A	No
16/03/17			,	Annadiny					in A	
								EPA Trigger		
								Levels for		
	BH-8A	Magnesium	Lab analysis	Annually	4.2	4.2	mg/l	W0129-02	N/A	No
16/03/17										
								Levels for		
	BH-8A	Mercury	Lab analysis	Annually	0.001	0.001	mg/l	W0129-02	N/A	No
16/03/17			· · · · ·							
								EPA Trigger		
		Orthophosphate						Levels for		
16/02/17	BH-8A	s	Lab analysis	Annually	0.04	0.04	mg/I	W0129-02	N/A	NO
10/03/11								EPA Trigger		
								Levels for		
	BH-8A	PAHs (Total 17)	Lab analysis	Annually	0.000295	0.000295	mg/l	W0129-02	N/A	No
16/03/17										
		Dhocphorus						EPA Trigger		
	BH-84	Phosphorus, Total	Lah analysis	Annually	10.28	10.28	mg/l	Levels for W/0129-02	N/A	No
16/03/17	BIT BA	Total	Lub analysis	Annualiy	10.20	10.20	1116/1	W0125 02	IN/A	110
-,,								EPA Trigger		
								Levels for		
/ /	BH-8A	Total Solids	Lab analysis	Annually	3716	3716	mg/l	W0129-02	N/A	No
16/03/17										
								Levels for		
	BH-8A	Zinc	Lab analysis	Annually	0.003	0.003	mg/l	W0129-02	N/A	No
16/03/17			· · · · ·							
20/06/17								EPA Trigger		
05/09/17	BUL O	Ammoniacal	t als an also ta		0.22	0.4335	<i>(</i>)	Levels for		No
30/11/17	BH-9	Nitrogen	Lab analysis	Quarterly	0.22	0.1325	mg/i	W0129-02	N/A	NO
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-9	Arsenic	Lab analysis	Quarterly	0.0401	0.0128	mg/l	W0129-02	N/A	No
16/03/17								504 T :		
20/06/17								LPA Trigger		
30/11/17	BH-9	Barium	Lab analysis	Quarterly	0,056	0,028	mg/l	W0129-02	N/A	No
16/03/17				quarterry	2.000	5.020				
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-9	Calcium	Lab analysis	Quarterly	107.6	105.475	mg/l	W0129-02	N/A	No
20/06/17								FPA Trigger		
05/09/17								Levels for		
30/11/17	BH-9	Chloride	Lab analysis	Quarterly	28.4	26.75	mg/l	W0129-02	75	No
16/03/17			· · ·	·		1				
20/06/17								EPA Trigger		
05/09/17	DUL 0	Calaura	Field an about		Chan	Chan	N1/A	Levels for		
30/11/17	RH-9	Colour	Field analysis	Quarterly	Clear	Clear	N/A	W0129-02	N/A	N/A
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-9	Conductivity	Field analysis	Quarterly	0.63	0	mS/cm	W0129-02	1	No

Groundwa	ater/Soil n	nonitoring te	emplate		Lic No:	W0129-02		Year	2017	
16/03/17										
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-9	Cyanide	Lab analysis	Quarterly	0.01	0.01	mg/l	W0129-02	N/A	No
16/03/17										
20/06/17								EPA Trigger		
05/09/17		Dissolved						Levels for		
30/11/17	BH-9	Oxygen	Lab analysis	Quarterly	5	3	mg/l	W0129-02	N/A	No
16/03/17										
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-9	Iron	Field analysis	Quarterly	1.19	0.3125	mg/l	W0129-02	N/A	No
16/03/17										
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-9	Level, Water	Lab analysis	Quarterly	104.98	104.2925	mOD	W0129-02	N/A	No
16/03/17										
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-9	Manganese	Field analysis	Quarterly	0.034	0.01825	mg/l	W0129-02	N/A	No
16/03/17										
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-9	Odour	Field analysis	Quarterly	None	None	N/A	W0129-02	N/A	N/A
16/03/17										
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-9	pH	Lab analysis	Quarterly	8.4	0	pH	W0129-02	6 <ph<9< td=""><td>No</td></ph<9<>	No
16/03/17										
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-9	Phenols, Total	Lab analysis	Quarterly	0.1	0.1	mg/l	W0129-02	0.1	No
16/03/17										
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-9	Potassium	Lab analysis	Quarterly	0.7	0.65	mg/l	W0129-02	N/A	No
16/03/17										
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-9	Sodium	Lab analysis	Quarterly	17.2	16.575	mg/l	W0129-02	80	No
16/03/17										
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-9	Sulphate	Field analysis	Quarterly	82.6	76.575	mg/l	W0129-02	150	No
16/03/17										
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-9	Temperature	Lab analysis	Quarterly	14.8	12.775	oC	W0129-02	N/A	No
16/03/17										
20/06/17								EPA Trigger		
05/09/17		Total Organic						Levels for		
30/11/17	BH-9	Carbon	Lab analysis	Quarterly	5	2.75	mg/l	W0129-02	50	No
16/03/17										
								EPA Trigger		
		Total Oxidized						Levels for		
	BH-9	Nitrogen	Lab analysis	Annually	0.2	0.2	mg/l	W0129-02	N/A	No
16/03/17										
								EPA Trigger		
					1	1		Louisle for		
								Levels for		

oroundw	ater/Soil	monitoring te	emplate		LIC NO:	W0129-02		Year	2017	
16/03/17								EDA Trian		
								EPA Trigger		
	BH-9	Cadmium	Lab analysis	Annually	0.005	0.005	mg/l	W0129-02	0.004	No
16/03/17	-			, unddiry			0,		0.001	
								EPA Trigger		
								Levels for		
16/02/17	BH-9	Chromium, Total	Lab analysis	Annually	0.0015	0.0015	mg/l	W0129-02	N/A	No
10/03/17								FPA Trigger		
		Coliforms,						Levels for		
	BH-9	Faecal	Lab analysis	Annually	0	0	cfus/100ml	W0129-02	N/A	No
16/03/17										
								EPA Trigger		
	BH-9	Coliforms Total	Lah analysis	Annually	0	0	cfus/100ml	Levels for W0129-02	N/A	No
16/03/17	5115	contornis, rotar	Lab analysis	Annuary			0.007 200111	110125 02	1975	
								EPA Trigger		
								Levels for		
16/02/17	BH-9	Copper	Lab analysis	Annually	0.007	0.007	mg/l	W0129-02	0.5	No
10/03/17								FPA Trigger		
								Levels for		
	BH-9	Fluoride	Lab analysis	Annually	0.3	0.3	mg/l	W0129-02	N/A	No
16/03/17										
								EPA Trigger		
	RH-0	beal	Lab analysis	Annually	0.005	0.005	mg/l	Levels for	N/A	No
16/03/17	BITS	LCuu	Lub unurysis	Annualiy	0.005	0.005	1116/1	10125 02	N/A	110
								EPA Trigger		
		List I and II						Levels for		
4.6 /00 /47	BH-9	Substances	Lab analysis	Annually	0.001	0.001	mg/l	W0129-02	N/A	No
16/03/17								EDA Trigger		
								Levels for		
	BH-9	Magnesium	Lab analysis	Annually	5.6	5.6	mg/l	W0129-02	N/A	No
16/03/17										
								EPA Trigger		
	PH 0	Morcupy	Lab analysis	Annually	0.001	0.001	mg/l	Levels for	N/A	No
16/03/17	511-5	wiercury	Lab analysis	Annualiy	0.001	0.001	iiig/i	W0125-02	N/A	NO
								EPA Trigger		
		Orthophosphate						Levels for		
46/02/47	BH-9	s	Lab analysis	Annually	0.03	0.03	mg/l	W0129-02	N/A	No
10/03/17								FPA Trigger		
								Levels for		
	BH-9	PAHs (Total 17)	Lab analysis	Annually	0.000295	0.000295	mg/l	W0129-02	N/A	No
16/03/17										
		Dhara						EPA Trigger		
	BH-0	Phosphorus,	Lah analysis	Annually	0 124	0 124	ma/l	Levels for	N/A	No
16/03/17	50-3	iotai	Lan andrysis	Annually	0.124	0.124	118/1	VV0125-02	IN/A	140
., , = .								EPA Trigger		
								Levels for		
	BH-9	Total Solids	Lab analysis	Annually	421	421	mg/l	W0129-02	N/A	No
16/03/17								EDA Triggor		
								Levels for		
		1			1	1		2010101		

Groundw	ater/Soil m	nonitoring te	emplate		Lic No: W0129-02				Year 2017			
16/03/17 20/06/17 05/09/17 30/11/17	BH-11A	Ammoniacal Nitrogen	Lab analysis	Quarterly	0.27	0.2375	mg/l	EPA Trigger Levels for W0129-02	N/A	No		
16/03/17 20/06/17 05/09/17 30/11/17	BH-11A	Arsenic	Lab analysis	Quarterly	0.0253	0.01675	mg/l	EPA Trigger Levels for W0129-02	N/A	No		
16/03/17 20/06/17 05/09/17 30/11/17	BH-11A	Barium	Lab analysis	Quarterly	0.017	0.01575	mg/l	EPA Trigger Levels for W0129-02	N/A	No		
16/03/17 20/06/17 05/09/17 30/11/17	BH-11A	Calcium	Lab analysis	Quarterly	97.8	97.325	mg/l	EPA Trigger Levels for W0129-02	N/A	No		
16/03/17 20/06/17 05/09/17 30/11/17	BH-11A	Chloride	Lab analysis	Quarterly	23.6	23.4	mg/l	EPA Trigger Levels for W0129-02	75	No		
16/03/17 20/06/17 05/09/17 30/11/17	BH-11A	Colour	Field analysis	Quarterly	Clear	Clear	N/A	EPA Trigger Levels for W0129-02	N/A	N/A		
16/03/17 20/06/17 05/09/17 30/11/17	BH-11A	Conductivity	Field analysis	Quarterly	0.64	0.56575	mS/cm	EPA Trigger Levels for W0129-02	1	No		
16/03/17 20/06/17 05/09/17 30/11/17	BH-11A	Cyanide	Lab analysis	Annually	0.01	0.01	mg/l	EPA Trigger Levels for W0129-02	N/A	No		
16/03/17 20/06/17 05/09/17 30/11/17	BH-11A	Dissolved Oxygen	Lab analysis	Quarterly	6	3.75	mg/l	EPA Trigger Levels for W0129-02	N/A	No		
16/03/17 20/06/17 05/09/17 30/11/17	BH-11A	Iron	Field analysis	Quarterly	0.02	0.02	mg/l	EPA Trigger Levels for W0129-02	N/A	No		
16/03/17 20/06/17 05/09/17 30/11/17	BH-11A	Level, Water	Lab analysis	Quarterly	98.46	98.4375	mOD	EPA Trigger Levels for W0129-02	N/A	No		
16/03/17 20/06/17 05/09/17								EPA Trigger Levels for				
30/11/17	BH-11A	Manganese	Field analysis	Quarterly	0.415	0.4005	mg/l	W0129-02	N/A	No		

16/03/17 20/06/17 05/09/17	
	N/A
30/11/17 BH-11A Odour Field analysis Quarterly None None N/A W0129-02 N/A	N/A
16/03/17 20/06/17 Image: Constraint of the constraint of th	No
Info3/17	No
16/03/17 16/03/17 20/06/17 05/09/17 30/11/17 BH-11A Potassium Lab analysis Quarterly 2.1 2 mg/l W0129-02 N/A	No
16/03/17 EPA EPA 16/03/17 20/06/17 20/06/17 EPA Trigger 05/09/17 Levels for Levels for EPA EPA	No
16/03/17 EPA Field analysis Quarterly 14.9 13.925 mg/l W0129-02 150	No
16/03/17 20/06/17 05/09/17 30/11/17 BH-11A Temperature Lab analysis Quarterly 13.1 11.5 OC W0129-02 N/A	No
Info3/17	No
16/03/17 16/	No
16/03/17 EPA Trigger Levels for	
BH-11A Boron Lab analysis Annually 0.012 0.012 mg/l W0129-02 N/A	No
16/03/17 EPA Trigger Levels for	
BH-11A Cadmium Lab analysis Annually 0.0005 0.0005 mg/l W0129-02 0.004	No
16/03/17 EPA Trigger Levels for	
BH-11A Chromium, Total Lab analysis Annually 0.0015 0.0015 mg/l W0129-02 N/A	No

Groundw	vater/Soil r	nonitoring te	emplate	-	Lic No:	W0129-02		Year	2017	
16/03/17								EPA		
		C-life man						Levels for		
	BH-11A	Faecal	Lab analysis	Annually	0	0	cfus/100ml	W0129-02	N/A	No
/ /							,	EPA		
16/03/17								Trigger		
								Levels for		
	BH-11A	Coliforms, Total	Lab analysis	Annually	0	0	cfus/100ml	W0129-02	N/A	No
16/03/17								EPA		
								Levels for		
	BH-11A	Copper	Lab analysis	Annually	0.007	0.007	mg/l	W0129-02	0.5	No
/ /							0,	EPA		
16/03/17								Trigger		
								Levels for		
	BH-11A	Fluoride	Lab analysis	Annually	0.4	0.4	mg/l	W0129-02	N/A	No
16/03/17								EPA		
								Levels for		
	BH-11A	Lead	Lab analysis	Annually	0.005	0.005	mg/l	W0129-02	N/A	No
/ /							6,	EPA	,	
16/03/17								Trigger		
		List I and II						Levels for		
	BH-11A	Substances	Lab analysis	Annually	0.0001	0.0001	mg/l	W0129-02	N/A	No
16/03/17								EPA		
								Levels for		
	BH-11A	Magnesium	Lab analysis	Annually	12.3	12.3	mg/l	W0129-02	N/A	No
46/02/47			-				0,	EPA	, i	
16/03/17								Trigger		
							"	Levels for		
	BH-11A	Mercury	Lab analysis	Annually	0.001	0.001	mg/l	W0129-02	N/A	No
16/03/17								Trigger		
		Orthophocobata						Levels for		
	BH-11A	s	Lab analysis	Annually	0.03	0.03	mg/l	W0129-02	N/A	No
46/02/47								EPA		
16/03/17								Trigger		
								Levels for		
	BH-11A	PAHs (Total 17)	Lab analysis	Annually	0.000295	0.000295	mg/l	W0129-02	N/A	No
16/03/17								Trigger		
		Phosphorus						Levels for		
	BH-11A	Total	Lab analysis	Annually	0.031	0.031	mg/l	W0129-02	N/A	No
16/02/47							0.	EPA		
10/03/17								Trigger		
								Levels for		
	BH-11A	Total Solids	Lab analysis	Annually	634	634	mg/l	W0129-02	N/A	No

Groundwater/Soil monitoring template					Lic No:	W0129-02		Year	201	7	
16/03/17	BH-11A	Zinc	Lab analysis	Annually	0.018	0.018	mg/l	EPA Trigger Levels for W0129-02	N/A	No	

.+ where average indicates arithmetic mean

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

Table 2: Downgradient Groundwater monitoring results

										Upward trend in yearly average pollutant
	Sample									concentration
Date of	location	Parameter/		Monitoring	Maximum	Average				over last 5 years
sampling	reference	Substance	Methodology	frequency	Concentration	Concentration	unit	GTV's*	SELECT**	of monitoring data
16/03/17								EDA Trigger		
05/09/17		Ammoniacal						Levels for		
30/11/17	BH-4A	Nitrogen	Lab analysis	Quarterly	5.29	2.71	mg/l	W0129-02	N/A	No
16/03/17										
20/06/17								EPA Trigger		
05/09/17	DU 44	A	Lab analysis	Quantanta	0.0025	0.0005		Levels for	N/A	N -
30/11/17	BH-4A	Arsenic	Lab analysis	Quarterly	0.0025	0.0025	mg/i	W0129-02	N/A	NO
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-4A	Barium	Lab analysis	Quarterly	0.009	0.0045	mg/l	W0129-02	N/A	No
16/03/17								CDA Triana		
20/06/17								EPA Trigger		
30/11/17	BH-4A	Calcium	Lab analysis	Quarterly	93.6	34.025	mg/l	W0129-02	N/A	No
16/03/17							5.			
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-4A	Chloride	Lab analysis	Quarterly	25.4	22.225	mg/l	W0129-02	75	No
20/06/17								FPA Trigger		
05/09/17								Levels for		
30/11/17	BH-4A	Colour	Field analysis	Quarterly	N/A	N/A	N/A	W0129-02	N/A	N/A
16/03/17										
20/06/17								EPA Trigger		
30/11/17	BH-4A	Conductivity	Field analysis	Quarterly	0.78	0.6525	mS/cm	W0129-02	1	No
16/03/17	511 111	conducting	ricia anarysis	quartery	0.70	010525			-	
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-4A	Cyanide	Lab analysis	Quarterly	0.02	0.02	mg/l	W0129-02	N/A	No
20/06/17								FPA Trigger		
05/09/17		Dissolved						Levels for		
30/11/17	BH-4A	Oxygen	Lab analysis	Quarterly	3	2.25	mg/l	W0129-02	N/A	No
16/03/17										
20/06/17								EPA Trigger		
05/09/17		Iron	Field analysis	Quarterly	0.102	0.0/175	mg/l	Levels for	N/A	No
16/03/17	DIT-4A	11011		Quarterry	0.102	0.04175	1118/1	VV0125-02	IN/A	
20/06/17								EPA Trigger		
05/09/17								Levels for		
30/11/17	BH-4A	Level, Water	Lab analysis	Quarterly	93.45	93.3825	mOD	W0129-02	N/A	No

Groundwa	ater/Soil r	monitoring te	emplate		Lic No:	W0129-02		Year	2017		
16/03/17											
20/06/17								EPA Trigger			
05/09/17								Levels for			
30/11/17	BH-4A	Manganese	Field analysis	Quarterly	0.287	0.09375	mg/l	W0129-02	N/A	No	
16/03/17											
20/06/17								EPA Trigger			
05/09/17								Levels for			
30/11/17	BH-4A	Odour	Field analysis	Quarterly	N/A	N/A	N/A	W0129-02	N/A	N/A	
16/03/17											
20/06/17								EPA Trigger			
05/09/17								Levels for			
30/11/17	BH-4A	pH	Lab analysis	Quarterly	9	8.65	pH	W0129-02	6 <ph<9< td=""><td>No</td><td></td></ph<9<>	No	
16/03/17			,								
20/06/17								EPA Trigger			
05/09/17								Levels for			
30/11/17	BH-4A	Phenols Total	Lah analysis	Quarterly	0.1	0.1	mg/l	W0129-02	0.1	No	
16/03/17	511 111	Thenois, Total	Lab analysis	quarterry	0.1	011			0.1		
20/06/17								EDA Trigger			
20/00/17								Levels for			
20/11/17		Dotoccium	Lab analysis	Quartarly	E 2	4.05	mg/l	W0120 02	N/A	No	
30/11/1/	вп-4А	POLASSIUM	Lap analysis	quarterly	5.3	4.05	iiig/1	VV0129-02	IN/A	NU	-
16/03/17											
20/06/17								EPA Trigger			
05/09/17		e 11			470.7		"	Levels for			
30/11/17	BH-4A	Sodium	Lab analysis	Quarterly	178.7	119.25	mg/l	W0129-02	80	No	
16/03/17											
20/06/17								EPA Trigger			
05/09/17								Levels for			
30/11/17	BH-4A	Sulphate	Field analysis	Quarterly	93.5	54.35	mg/l	W0129-02	150	No	
16/03/17											
20/06/17								EPA Trigger			
05/09/17								Levels for			
30/11/17	BH-4A	Temperature	Lab analysis	Quarterly	20.5	13.425	oC	W0129-02	N/A	No	
16/03/17											
20/06/17								EPA Trigger			
05/09/17		Total Organic						Levels for			
30/11/17	BH-4A	Carbon	Lab analysis	Quarterly	2	2	mg/l	W0129-02	50	No	
16/03/17											
								EPA Trigger			
		Total Oxidized						Levels for			
	BH-4A	Nitrogen	Lab analysis	Annually	0.2	0.2	mg/l	W0129-02	N/A	No	
16/03/17		ogen		,	0.2	012	· ان		,,,		1
,,,								FPA Trigger			
								Levels for			
	BH-44	Boron	Lah analysis	Annually	0.012	0.012	mg/l	W/0129-02	N/A	No	
16/03/17	DITHA	boron	Lab analysis	Annually	0.012	0.012	116/1	VV012J-02	11/75		-
10/03/17								EDA Triggor			
								Levels for			
		Cadmium	Lab analysis	Annually	0.0005	0.0005	mg/l	W/0120.02	0.004	No	
16/02/17	DIT-4A	Cauffilum	Lau alldiysis	Additionally	0.0005	0.0005	111g/1	VV0129-02	0.004		-
10/05/17					1			EDA Taiana			
					1			EPA migger			
	DU 44	Characterized T is 1	Lab an about	A	0.0015	0.0045		Levels for	N1/A		1
46/02/47	вн-4А	chromium, Total	Lab analysis	Annually	0.0015	0.0015	mg/1	W0129-02	N/A	INU	4
16/03/17					1						
		- 14						EPA Trigger			1
		Coliforms,			1			Levels for			
	BH-4A	Faecal	Lab analysis	Annually	0	0	cfus/100ml	W0129-02	N/A	No	1
16/03/17											
					1			EPA Trigger			
								Levels for			

Groundw	vater/Soil r	nonitoring te	emplate		Lic No:	W0129-02		Year	2017	
6/03/17								EDA Triggor		
								Levels for		
	BH-4A	Copper	Lab analysis	Annually	0.007	0.007	mg/l	W0129-02	0.5	No
16/03/17								FPA Trigger		
								Levels for		
46/02/47	BH-4A	Fluoride	Lab analysis	Annually	0.3	0.3	mg/l	W0129-02	N/A	No
16/03/17								EPA Trigger		
								Levels for		
16/03/17	BH-4A	Lead	Lab analysis	Annually	0.005	0.005	mg/l	W0129-02	N/A	No
10/03/17								EPA Trigger		
		List I and II				0.04		Levels for		
16/03/17	BH-4A	Substances	Lab analysis	Annually	0.01	0.01	mg/i	W0129-02	N/A	NO
. ,								EPA Trigger		
	BH-4A	Magnesium	Lah analycic	Annually	10	10	mg/l	Levels for	N/A	No
16/03/17	DI1=4M	iviagriesiulli	Lan anaiysis	Annually	10	10	116/1	¥¥U123-UZ	N/A	
								EPA Trigger		
	BH-4A	Mercury	Lab analysis	Annually	0.001	0.001	mg/l	Levels for W0129-02	N/A	No
16/03/17		,		,						
		Orthophocohota						EPA Trigger		
	BH-4A	s	Lab analysis	Annually	0.03	0.03	mg/l	W0129-02	N/A	No
16/03/17		1 1			1					
								EPA Trigger Levels for		
	BH-4A	PAHs (Total 17)	Lab analysis	Annually	0.000295	0.000295	mg/l	W0129-02	N/A	No
16/03/17								EDA Triggor		
		Phosphorus,						Levels for		
/	BH-4A	Total	Lab analysis	Annually	0.11	0.11	mg/l	W0129-02	N/A	No
16/03/17								FPA Trigger		
								Levels for		
16/03/17	BH-4A	Total Solids	Lab analysis	Annually	552	552	mg/l	W0129-02	N/A	No
10/03/17								EPA Trigger		
								Levels for		
	BH-4A	Zinc	Lab analysis	Annually	0.003	0.003	mg/l	W0129-02	N/A	No
16/03/17								Trigger		
20/06/17		Ammoniacal						Levels for		
30/11/17	BH-10A	Nitrogen	Lab analysis	Quarterly	0.19	0.0775	mg/l	W0129-02	N/A	No
4.6./00./47					1		0.	EPA		
16/03/17 20/06/17								Trigger		
05/09/17								Levels for		
30/11/17	BH-10A	Arsenic	Lab analysis	Quarterly	0.0125	0.00505	mg/l	W0129-02	N/A	No
16/03/17								EPA Trigger		
20/06/17								Levels for		
05/09/17 30/11/17	BH-10A	Barium	Lab analysis	Quarterly	0.015	0.01125	mg/l	W0129-02	N/A	No
		1			1	1	0/			

Groundwa	ater/Soil m	nonitoring te	emplate		Lic No:	W0129-02		Year	2017		
16/03/17 20/06/17 05/09/17 30/11/17	BH-10A	Calcium	Lab analysis	Quarterly	170.7	137.55	mg/l	EPA Trigger Levels for W0129-02	N/A	No	
16/03/17 20/06/17 05/09/17 30/11/17	BH-10A	Chloride	Lab analysis	Quarterly	59.5	59.075	mg/l	EPA Trigger Levels for W0129-02	75	No	
16/03/17 20/06/17 05/09/17 30/11/17	BH-10A	Colour	Field analysis	Quarterly	Clear	Clear	N/A	EPA Trigger Levels for W0129-02	N/A	N/A	
16/03/17 20/06/17 05/09/17 30/11/17	BH-10A	Conductivity	Field analysis	Quarterly	0.94	0.762	mS/cm	EPA Trigger Levels for W0129-02	1	No	
16/03/17 20/06/17 05/09/17 30/11/17	BH-10A	Cyanide	Lab analysis	Quarterly	0.01	0.01	mg/l	EPA Trigger Levels for W0129-02	N/A	No	
16/03/17 20/06/17 05/09/17 30/11/17	BH-10A	Dissolved Oxygen	Lab analysis	Quarterly	10	9.14	mg/l	EPA Trigger Levels for W0129-02	N/A	No	
16/03/17 20/06/17 05/09/17 30/11/17	BH-10A	Iron	Lab analysis	Quarterly	0.02	0.02	mg/l	EPA Trigger Levels for W0129-02	N/A	No	
16/03/17 20/06/17 05/09/17 30/11/17	BH-10A	Level, Water	Field analysis	Quarterly	99.88	99.28	mg/l	EPA Trigger Levels for W0129-02	N/A	No	
16/03/17 20/06/17 05/09/17 30/11/17	BH-10A	Manganese	Field analysis	Quarterly	0.002	0.002	mg/l	EPA Trigger Levels for W0129-02	N/A	No	
16/03/17 20/06/17 05/09/17 30/11/17	BH-10A	Odour	Field analysis	Quarterly	None	None	N/A	EPA Trigger Levels for W0129-02	N/A	N/A	
16/03/17 20/06/17 05/09/17 30/11/17	BH-10A	рН	Lab analysis	Quarterly	10.65	8.5875	рН	EPA Trigger Levels for W0129-02	6 <ph<9< td=""><td>No</td><td></td></ph<9<>	No	
16/03/17 20/06/17 05/09/17 30/11/17	BH-10A	Phenols, Total	Lab analysis	Quarterly	0.1	0.1	mg/l	EPA Trigger Levels for W0129-02	0.1	No	

Groundw	ater/Soil r	nonitoring te	mplate		Lic No:	W0129-02		Year	2017	
16/03/17 20/06/17 05/09/17 30/11/17	BH-10A	Potassium	Lab analysis	Quarterly	2.8	2.575	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-10A	Sodium	Lab analysis	Quarterly	31.8	31.1	mg/l	EPA Trigger Levels for W0129-02	80	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-10A	Sulphate	Field analysis	Quarterly	261.2	258.1	mg/l	EPA Trigger Levels for W0129-02	150	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-10A	Temperature	Lab analysis	Quarterly	19	13.075	oC	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-10A	Total Organic Carbon	Lab analysis	Quarterly	12	4.5	mg/l	EPA Trigger Levels for W0129-02	50	No
16/03/17	BH-10A	Total Oxidized Nitrogen	Lab analysis	Annually	0.2	0.2	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17	BH-10A	Boron	Lab analysis	Annually	0.12	0.12	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17	BH-10A	Cadmium	Lab analysis	Annually	0.0005	0.0005	mg/l	EPA Trigger Levels for W0129-02	0.004	No
16/03/17								EPA Trigger Levels for	51/6	
16/03/17	BH-10A	Chromium, Total	Lab analysis	Annually	0.0015	0.0015	mg/I	EPA Trigger Levels for	N/A	NO
16/03/17	BH-10A	Faecal	Lab analysis	Annually	0	0	cfus/100ml	W0129-02 EPA Trigger	N/A	No
	BH-10A	Coliforms, Total	Lab analysis	Annually	0	0	cfus/100ml	W0129-02	N/A	No
16/03/17								EPA Trigger Levels for		
	BH-10A	Copper	Lab analysis	Annually	0.007	0.007	mg/l	W0129-02	0.5	No

Groundw	ater/Soil r	nonitoring te	emplate		Lic No:	W0129-02		Year	2017	
16/03/17								EPA Trigger Levels for		
	BH-10A	Fluoride	Lab analysis	Annually	0.3	0.3	mg/l	W0129-02	N/A	No
16/03/17	ВН-10А	Lead	Lab analysis	Annually	0.005	0.005	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17		List I and II					0	EPA Trigger Levels for		
	BH-10A	Substances	Lab analysis	Annually	0.01	0.01	mg/l	W0129-02	N/A	No
16/03/17	BH-10A	Magnesium	Lab analysis	Annually	10.2	10.2	mg/l	Trigger Levels for W0129-02	N/A	No
16/03/17	BH-10A	Mercury	Lab analysis	Annually	0.001	0.001	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17	RH-104	Orthophosphate	l ah analysis	Annually	0.03	0.03	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17				Andday	0.05	0.03		EPA Trigger Levels for		
	BH-10A	PAHs (Total 17)	Lab analysis	Annually	0.000295	0.000295	mg/l	W0129-02	N/A	No
16/03/17	BH-10A	Phosphorus, Total	Lab analysis	Annually	0.073	0.073	mg/l	Trigger Levels for W0129-02	N/A	No
16/03/17	BH-10A	Total Solids	Lah analysis	Annually	628	628	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17				,				EPA Trigger Levels for		
	BH-10A	Zinc	Lab analysis	Annually	0.007	0.007	mg/l	W0129-02	N/A	No
16/03/17 20/06/17 05/09/17	011 12	Ammoniacal	Lak analysi-	Quartashi	0.04	0.0375		EPA Trigger Levels for	N/0	No
30/11/17	RH-17	Nitrogen	Lab analysis	Quarteriy	0.04	0.0375	mg/i	FPΔ	N/A	NO
16/03/17 20/06/17 05/09/17 30/11/17	BH-12	Arsenic	Lab analysis	Quarterly	0.0025	0.0025	mg/l	Trigger Levels for	N/A	No

Groundw	/ater/Soil m	nonitoring to	emplate		Lic No:	W0129-02		Year	2017		
16/03/17 20/06/17 05/09/17 30/11/17	BH-12	Barium	Lab analysis	Quarterly	0.014	0.012	mg/l	EPA Trigger Levels for W0129-02	N/A	No	
16/03/17 20/06/17 05/09/17 30/11/17	BH-12	Calcium	Lab analysis	Quarterly	91.8	42.775	mg/l	EPA Trigger Levels for W0129-02	N/A	No	
16/03/17 20/06/17 05/09/17 30/11/17	BH-12	Chloride	Lab analysis	Quarterly	21.7	7.1	mg/l	EPA Trigger Levels for W0129-02	75	No	
16/03/17 20/06/17 05/09/17 30/11/17	BH-12	Colour	Field analysis	Quarterly	Clear	Clear	N/A	EPA Trigger Levels for W0129-02	N/A	N/A	
16/03/17 20/06/17 05/09/17 30/11/17	BH-12	Conductivity	Field analysis	Quarterly	0.502	0.22875	mS/cm	EPA Trigger Levels for W0129-02	1	No	
16/03/17 20/06/17 05/09/17 30/11/17	BH-12	Cyanide	Lab analysis	Annually	0.01	0.01	mg/l	EPA Trigger Levels for W0129-02	N/A	No	
16/03/17 20/06/17 05/09/17 30/11/17	ВН-12	Dissolved Oxygen	Lab analysis	Quarterly	6	5.75	mg/l	EPA Trigger Levels for W0129-02	N/A	No	
16/03/17 20/06/17 05/09/17 30/11/17	BH-12	Iron	Field analysis	Quarterly	0.02	0.02	mg/l	EPA Trigger Levels for W0129-02	N/A	No	
16/03/17 20/06/17 05/09/17 30/11/17	BH-12	Level, Water	Lab analysis	Quarterly	100.66	100.075	mOD	EPA Trigger Levels for W0129-02	N/A	No	
16/03/17 20/06/17 05/09/17 30/11/17	BH-12	Manganese	Field analysis	Quarterly	0.002	0.002	mg/l	EPA Trigger Levels for W0129-02	N/A	No	
16/03/17 20/06/17 05/09/17 30/11/17	BH-12	Odour	Field analysis	Quarterly	#VALUE!	#VALUE!	N/A	EPA Trigger Levels for W0129-02	N/A	N/A	
16/03/17 20/06/17 05/09/17 30/11/17	BH-12	рН	Lab analysis	Quarterly	8.1	7.7875	рН	EPA Trigger Levels for W0129-02	6 <ph<9< td=""><td>No</td><td></td></ph<9<>	No	

Groundw	ater/Soil ı	monitoring te	emplate		Lic No:	W0129-02		Year	2017	
16/03/17 20/06/17 05/09/17 30/11/17	BH-12	Phenols, Total	Lab analysis	Quarterly	0.1	0.1	mg/l	EPA Trigger Levels for W0129-02	0.1	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-12	Potassium	Lab analysis	Quarterly	3.3	2.575	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-12	Sodium	Lab analysis	Quarterly	11	4.875	mg/l	EPA Trigger Levels for W0129-02	80	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-12	Sulphate	Field analysis	Quarterly	34.1	11.825	mg/l	EPA Trigger Levels for W0129-02	150	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-12	Temperature	Lab analysis	Quarterly	12.3	10.85	oC	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-12	Total Organic Carbon	Lab analysis	Quarterly	3	2.25	mg/l	EPA Trigger Levels for W0129-02	50	No
16/03/17	BH-12	Total Oxidized Nitrogen	Lab analysis	Annually	1.2	0.7	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17	BH-12	Boron	Lab analysis	Annually	0.012	0.012	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17	RH_12	Cadmium	Lab analysis	Appually	0.0005	0.0005	ma/l	EPA Trigger Levels for	0.004	No
16/03/17	DI (*12	Caumium		Annualiy	0.0003	0.0003	118/1	EPA Trigger Levels for	0.004	
16/03/17	BH-12	Chromium, Total	Lab analysis	Annually	0.0015	0.0015	mg/l	W0129-02 EPA Trigger	N/A	No
	BH-12	Coliforms, Faecal	Lab analysis	Annually	0	0	cfus/100ml	W0129-02	N/A	No
16/03/17								EPA Trigger Levels for		
	BH-12	Coliforms, Total	Lab analysis	Annually	0	0	cfus/100ml	W0129-02	N/A	No

Groundw	ater/Soil	monitoring te	emplate		Lic No:	W0129-02		Year	2017	
16/03/17								EPA		
								Irigger		
					0.007			Levels for	0.5	N.,
	BH-12	Copper	Lab analysis	Annually	0.007	0.007	mg/I	W0129-02	0.5	No
16/03/17								EPA		
								Irigger		
								Levels for		
	BH-12	Fluoride	Lab analysis	Annually	0.3	0.3	mg/I	W0129-02	N/A	NO
16/03/17								EPA		
								Irigger		
	DU 42	Land	tak analysis	A	0.005	0.005		Levels for	NI / A	Ne
	BH-12	Lead	Lab analysis	Annually	0.005	0.005	mg/i	W0129-02	N/A	NO
16/03/17								Triggor		
								Lovols for		
	DU 13	List I and II	Lab analysis	Annually	0.001	0.001	mg/l	Levels for	NI / A	No
	DH-12	Substances	Lan allalysis	Annually	0.001	0.001	iiig/i	FDA	IN/A	NU
16/03/17								Trigger		
								Levels for		
	BH-12	Magnesium	Lab analysis	Appually	19	4.9	mg/l	W/0129-02	N/A	No
	DIT-12	Wagnesium	Lab analysis	Annualiy	4.5	4.5	iiig/i	FPΔ	N/A	NO
16/03/17								Trigger		
								Levels for		
	BH-12	Mercury	Lab analysis	Annually	0.001	0.001	mg/l	W0129-02	N/A	No
				,				EPA	,,.	
16/03/17								Trigger		
		Orthophosphate						Levels for		
	BH-12	s	Lab analysis	Annually	0.15	0.15	mg/l	W0129-02	N/A	No
			· · ·					EPA	,	
16/03/17								Trigger		
								Levels for		
	BH-12	PAHs (Total 17)	Lab analysis	Annually	0.000437	0.000437	mg/l	W0129-02	N/A	No
					Ì	1		EPA	T	
16/03/17								Trigger		
		Phosphorus.						Levels for		
	BH-12	Total	Lab analysis	Annually	0.514	0.514	mg/l	W0129-02	N/A	No
10/02/47								EPA		
10/03/1/								Trigger		
								Levels for		
	BH-12	Total Solids	Lab analysis	Annually	728	728	mg/l	W0129-02	N/A	No
16/03/17								EPA		
10/03/17								Trigger		
								Levels for		
	BH-12	Zinc	Lab analysis	Annually	0.003	0.003	mg/l	W0129-02	N/A	No
16/03/17								EPA		
20/06/17								Trigger		
05/09/17		Ammoniacal						Levels for		
30/11/17	BH-13	Nitrogen	Lab analysis	Quarterly	0.12	0.065	mg/l	W0129-02	N/A	No

Groundw	/ater/Soil n	nonitoring to	emplate		Lic No:	W0129-02		Year	2017	
16/03/17 20/06/17 05/09/17 30/11/17	BH-13	Arsenic	Lab analysis	Quarterly	0.0043	0.00295	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-13	Barium	Lab analysis	Quarterly	0.011	0.00925	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-13	Calcium	Lab analysis	Quarterly	61	58.25	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-13	Chloride	Lab analysis	Quarterly	42.9	40.575	mg/l	EPA Trigger Levels for W0129-02	75	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-13	Colour	Field analysis	Quarterly	Clear	Clear	N/A	EPA Trigger Levels for W0129-02	N/A	N/A
16/03/17 20/06/17 05/09/17 30/11/17	BH-13	Conductivity	Field analysis	Quarterly	0.45	0.40025	mS/cm	EPA Trigger Levels for W0129-02	1	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-13	Cyanide	Lab analysis	Annually	0.3	0.3	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-13	Dissolved Oxygen	Lab analysis	Quarterly	10	9.25	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-13	Iron	Field analysis	Quarterly	0.02	0.02	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-13	Level, Water	Lab analysis	Quarterly	112.81	107.06	mOD	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-13	Manganese	Field analysis	Quarterly	0.002	0.002	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-13	Odour	Field analysis	Quarterly	None	None	N/A	EPA Trigger Levels for W0129-02	N/A	N/A

Groundw	/ater/Soil ı	monitoring te	emplate		Lic No:	W0129-02		Year	2017	
16/03/17 20/06/17 05/09/17 30/11/17	BH-13	рН	Lab analysis	Quarterly	8.5	7.81	pH	EPA Trigger Levels for W0129-02	6 <ph<9< th=""><th>No</th></ph<9<>	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-13	Phenols, Total	Lab analysis	Quarterly	0.1	0.055	mg/l	EPA Trigger Levels for W0129-02	0.1	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-13	Potassium	Lab analysis	Quarterly	2	1.925	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-13	Sodium	Lab analysis	Quarterly	19.1	17.725	mg/l	EPA Trigger Levels for W0129-02	80	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-13	Sulphate	Field analysis	Quarterly	14.2	13.45	mg/l	EPA Trigger Levels for W0129-02	150	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-13	Temperature	Lab analysis	Quarterly	12.8	10.925	oC	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-13	Total Organic Carbon	Lab analysis	Quarterly	18	6	mg/l	EPA Trigger Levels for W0129-02	50	No
16/03/17	BH-13	Total Oxidized Nitrogen	Lab analysis	Annually	12.2	10.775	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17	RH-13	Boron	Lab analysis	Appually	0.012	0.012	ma/l	EPA Trigger Levels for	N/A	No
16/03/17	011-13	boron		Annually	0.012	0.012	1115/1	EPA Trigger Levels for		
16/03/17	BH-13	Cadmium	Lab analysis	Annually	0.0005	0.0005	mg/l	W0129-02 EPA Trigger	0.004	No
	BH-13	Chromium, Total	Lab analysis	Annually	0.0015	0.0015	mg/l	Levels for W0129-02	N/A	No
16/03/17		Coliforms,						EPA Trigger Levels for		
	BH-13	Faecal	Lab analysis	Annually	0	0	cfus/100ml	W0129-02	N/A	No

Groundwa	ater/Soil r	monitoring te	emplate		Lic No:	W0129-02		Year	2017		
16/03/17								EPA			
10/03/17								Trigger			
							(/100 l	Levels for			
	BH-13	Coliforms, Total	Lab analysis	Annually	0	0	cfus/100ml	W0129-02	N/A	No	-
16/03/17								EPA			
								Levels for			
	BH-13	Conner	Lah analysis	Annually	0.007	0.007	mg/l	W0129-02	0.5	No	
	511 15	copper	Lab analysis	, unddiry	0.007	0.007	116/1	EPA	0.5	110	-
16/03/17								Trigger			
								Levels for			
	BH-13	Fluoride	Lab analysis	Annually	0.01	0.01	mg/l	W0129-02	N/A	No	
46/00/47								EPA			
16/03/17								Trigger			
								Levels for			
	BH-13	Lead	Lab analysis	Annually	0.005	0.005	mg/l	W0129-02	N/A	No	
16/03/17								EPA			
								Trigger			
		List I and II					"	Levels for			
	BH-13	Substances	Lab analysis	Annually	0.01	0.01	mg/I	W0129-02	N/A	NO	-
16/03/17								Trigger			
								Levels for			
	BH-13	Magnesium	Lab analysis	Annually	4.4	4.4	mg/l	W0129-02	N/A	No	
				,				EPA	,,.		
16/03/17								Trigger			
								Levels for			
	BH-13	Mercury	Lab analysis	Annually	0.001	0.001	mg/l	W0129-02	N/A	No	
16/02/17								EPA			
10/03/17								Trigger			
		Orthophosphate						Levels for			
	BH-13	S	Lab analysis	Annually	0.15	0.15	mg/l	W0129-02	N/A	No	_
16/03/17								EPA			
								I rigger			
	RH-13	PAHs (Total 17)	Lab analysis	Appually	0.001	0.001	mg/l	W0129-02	N/A	No	
	DII-13	rAns (rotar 17)	Lab analysis	Annually	0.001	0.001	1118/1	FPA	N/A	NO	
16/03/17								Trigger			
		Phosphorus						Levels for			
	BH-13	Total	Lab analysis	Annually	13.43	13.43	mg/l	W0129-02	N/A	No	
16/02/47								EPA			1
10/03/17								Trigger			
								Levels for			
	BH-13	Total Solids	Lab analysis	Annually	44324	44324	mg/l	W0129-02	N/A	No	
16/03/17								EPA			
								Trigger			
	DU 42	71.0.0	tak saskat	A	0.000	0.000		Levels for	NI / A	Ne	
	BH-13	∠inc	Lab analysis	Annually	0.003	0.003	mg/I	W0129-02	N/A	NO	4

Groundwater	/Soil monitoring	emplate		Lic No:	W0129-02		Year	2017	
16/03/17 20/06/17 05/09/17 30/11/17 BI	Ammoniacal H-14 Nitrogen	Lab analysis	Quarterly	1.31	0.3825	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17 BI	H-14 Arsenic	Lab analysis	Quarterly	0.0026	0.002525	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17 BI	H-14 Barium	Lab analysis	Quarterly	0.02	0.01125	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17 BI	H-14 Calcium	Lab analysis	Quarterly	24.4	23.575	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17 BI	H-14 Chloride	Lab analysis	Quarterly	35.5	33.525	mg/l	EPA Trigger Levels for W0129-02	75	No
16/03/17 20/06/17 05/09/17 30/11/17 BI	H-14 Colour	Field analysis	Quarterly	Clear	Clear	N/A	EPA Trigger Levels for W0129-02	N/A	N/A
16/03/17 20/06/17 05/09/17 30/11/17 BI	H-14 Conductivity	Field analysis	Quarterly	0.62	0.325	mS/cm	EPA Trigger Levels for W0129-02	1	No
16/03/17 20/06/17 05/09/17 30/11/17 BI	H-14 Cyanide	Lab analysis	Annually	0.3	0.3	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17 BI	Dissolved H-14 Oxygen	Lab analysis	Quarterly	9	6.25	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17 BI	H-14 Iron	Field analysis	Quarterly	0.08	0.035	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17 BI	H-14 Level, Water	Lab analysis	Quarterly	98.93	98.375	mOD	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17	H-14 Mangapage	Field analysis	Quarterly	0.069	0.02125	mg/l	EPA Trigger Levels for	N/A	No

Groundw	ater/Soil	monitoring te	mplate		Lic No:	W0129-02		Year	2017	
16/03/17 20/06/17 05/09/17 30/11/17	BH-14	Odour	Field analysis	Quarterly	None	None	N/A	EPA Trigger Levels for W0129-02	N/A	N/A
16/03/17 20/06/17 05/09/17 30/11/17	ВН-14	ρH	Lab analysis	Quarterly	7.8	7.1175	ρH	EPA Trigger Levels for W0129-02	6 <ph<9< td=""><td>No</td></ph<9<>	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-14	Phenols, Total	Lab analysis	Quarterly	0.1	0.055	mg/l	EPA Trigger Levels for W0129-02	0.1	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-14	Potassium	Lab analysis	Quarterly	2.7	2.15	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-14	Sodium	Lab analysis	Quarterly	14	13.375	mg/l	EPA Trigger Levels for W0129-02	80	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-14	Sulphate	Field analysis	Quarterly	16.1	13.575	mg/l	EPA Trigger Levels for W0129-02	150	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-14	Temperature	Lab analysis	Quarterly	13.2	11.35	oC	EPA Trigger Levels for W0129-02	N/A	No
16/03/17 20/06/17 05/09/17 30/11/17	BH-14	Total Organic Carbon	Lab analysis	Quarterly	4	2.75	mg/l	EPA Trigger Levels for W0129-02	50	No
16/03/17	BH-14	Total Oxidized Nitrogen	Lab analysis	Annually	9.7	8.75	mg/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17	BH-14	Boron	Lab analysis	Annually	0.018	0.018	mø/l	EPA Trigger Levels for W0129-02	N/A	No
16/03/17	0.121		200 0101703					EPA Trigger Levels for		
	BH-14	Cadmium	Lab analysis	Annually	0.0022	0.0022	mg/l	W0129-02	0.004	No
16/03/17		Chromium Tet	Lab archiste	Amm 11.	0.0045	0.0045		Trigger Levels for	NI / A	Nie
	BH-14	Chromium, Total	Lab analysis	Annually	0.0015	0.0015	mg/l	W0129-02	N/A	No

Groundwa	ater/Soil ı	monitoring te	emplate		Lic No:	W0129-02		Year	2017	
16/03/17								EPA		
								Trigger		
	DU 14	Coliforms,	Lab analysis	Appually	0	0	cfus/100ml	Levels for	NI/A	No
	вп-14	Faeca	Lab analysis	Annually	0	0	cius/100iiii	FDA	N/A	INU
16/03/17								Trigger		
								Levels for		
	BH-14	Coliforms, Total	Lab analysis	Annually	0	0	cfus/100ml	W0129-02	N/A	No
		,					,	EPA	,	
16/03/17								Trigger		
								Levels for		
	BH-14	Copper	Lab analysis	Annually	0.012	0.012	mg/l	W0129-02	0.5	No
16/02/17								EPA		
10/03/17								Trigger		
								Levels for		
	BH-14	Fluoride	Lab analysis	Annually	0.01	0.01	mg/l	W0129-02	N/A	No
16/03/17								EPA		
								Trigger		
								Levels for		
	BH-14	Lead	Lab analysis	Annually	0.005	0.005	mg/l	W0129-02	N/A	No
16/03/17								EPA		
								Lovels for		
	BH-14	List I and II	Lab analysis	Appually	0.001	0.001	mg/l	W/0120-02	N/A	No
	D11-14	Substances	Lab analysis	Annualiy	0.001	0.001	1118/1	FPA	N/A	NO
16/03/17								Trigger		
								Levels for		
	BH-14	Magnesium	Lab analysis	Annually	2.7	2.7	mg/l	W0129-02	N/A	No
/ /								EPA		
16/03/17								Trigger		
								Levels for		
	BH-14	Mercury	Lab analysis	Annually	0.001	0.001	mg/l	W0129-02	N/A	No
16/03/17								EPA		
10/03/17								Trigger		
		Orthophosphate						Levels for		
	BH-14	S	Lab analysis	Annually	0.006	0.006	mg/l	W0129-02	N/A	No
16/03/17								EPA		
								Levels for		
	BH-14	PAHs (Total 17)	Lah analysis	Annually	0.01	0.01	mg/l	W/0129_02	N/A	No
	011 14		200 010193/3	Amouny	0.01	0.01	1116/1	EPA	11/2	140
16/03/17								Trigger		
		Phosphorus						Levels for		
	BH-14	Total	Lab analysis	Annually	0.3	0.3	mg/l	W0129-02	N/A	No
46/00/47								EPA		
16/03/17								Trigger		
								Levels for		
	BH-14	Total Solids	Lab analysis	Annually	196	196	mg/l	W0129-02	N/A	No

Groundw	vater/Soil m	nonitoring t	emplate		Lic No:	W0129-02		Year	2017			
16/03/17								EPA Trigger Levels for				
	BH-14	Zinc	Lab analysis	Annually	0.019	0.019	mg/l	W0129-02	N/A	No	-	
trend in complet More inform criteria (GAC (see the link i	results for a sub: e the Groundwa ation on the use) and risk assessi in G31)	stance indicates t ter Monitoring G of soil and grour ment tools is ava	that further interpl uideline Template dwater standards, ilable in the EPA pu	retation of monitoring Report at the link pro otherwise instructed b / generic assessment Jblished guidance	results is required. In a vided and submit separ by the EPA. Guidance on th	ddition to completing ately through ALDER a e Management of C	the above table, please as a licensee return or as contaminated Land and Gr	<u>Grou</u> oundwater a	ndwater monito	ring template ites (EPA 2013).	-	
**Dependin to the GTV 6	ng on location of e.g. if the site is o	the site and prox close to surface v	imity to other sens vater compare to S supply compare	sitive receptors altern Surface Water Environ e results to the Drinkin	ative Receptor based W mental Quality Standar g Water Standards (DW	'ater Quality standard ds (SWEQS), If the site /S)	s should be used in addition is close to a drinking water	<u>Surface</u> water EQS	<u>Groundwater</u> <u>regulations</u> <u>GTV's</u>	Drinking water (private supply) standards	Drinking water (public supply) standards	<u>Interim Guideli</u> Values (IGV)
Table 3:	Soil results	1		-		1		1				
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

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3	U.

Environmental Liabilities template	Lic No:	W0129-02	Year	2017
Click here to access EPA guidance on Environmental Liabilities and Financial				
provision				

Commentary ELRA initial agreement status 1 Submitted and agreed by EPA 2 ELRA review status Review required and completed 3 Amount of Financial Provision cover required as determined by the latest ELRA €361,550 4 Financial Provision for ELRA status Submitted and agreed by EPA 5 Financial Provision for ELRA - amount of cover €361,550 6 Financial Provision for ELRA - type vironmental Impairment Liability insurance 7 Financial provision for ELRA expiry date Enter expiry date 8 Closure plan initial agreement status losure plan submitted and agreed by EPA 9 Closure plan review status Review required and completed 10 Financial Provision for Closure status SELECT 11 Financial Provision for Closure - amount of cover €945,664 12 Financial Provision for Closure - type cash deposit 13 Financial provision for Closure expiry date Enter expiry date

	Environmental Management Programme/Continuous Improvement Programme	template	Lic No:	W0129-02	Year	2017
	Highlighted cells contain dropdown menu click to view		Additional Information			
1	Do you maintain an Environmental Mangement System (EMS) for the site. If yes, please detail in additional information	Yes				
2	Does the EMS reference the most significant environmental aspects and associated impacts on-site	Yes				
	Does the EMS maintain an Environmental Management Programme (EMP) as required in accordance					
3	with the licence requirements	Yes				
	Do you maintain an environmental documentation/communication system to inform the public on					
4	environmental performance of the facility, as required by the licence	SELECT				

Environmental Management Programme	(EMP) report				
Objective Category	Target	Status (% completed)	How target was progressed	Responsibility	Intermediate outcomes
	Ongoing monitoring and				Improved Environmental
	ongoing monitoring and				
Groundwater protection	measurement - water	100	Monitoring completed	Individual	Management Practices
	Ongoing monitoring and				Improved Environmental
Noise reduction	measurement - noise	100	Monitoring completed	Individual	Management Practices
	Ongoing monitoring and				Improved Environmental
Reduction of emissions to Air	measurement - dust	100	Monitoring completed	Individual	Management Practices
	Ongoing monitoring and				Improved Environmental
Energy Efficiency/Utility conservation	measurement - energy	100	Monitoring completed	Individual	Management Practices

	1	Noise monitor	ing summary	report			Lic No:	W0129-02	Year	2017
Was noise mo	onitoring a licen	ice requirement fo	or the AER period	1?				SELECT		
If yes please f	fill in table N1 n	oise summary bel	ow				Noice			
	onitoring carried	d out using the FD	A Guidance note	including o	ompletion of	tha	Guidance	SELECT		
"Checklist for	r noise measure	ment report" inclu	uded in the guida	nce note as	table 6?	the	note NG4	JLLCI		
B Does your site	e have a noise r	eduction plan						SELECT		
When was th	e noise reductio	on plan last update	ed?					Enter date]	
Have there b	een changes rel	levant to site nois	e emissions (e.g.	plant or ope	erational chai	nges) since t	he last noise	SELECT		
			survey?							
Table N1: No	ise monitoring	summarv								
	Ĭ									
Date of		Noise location	Noise sensitive location -NSL					Tonal or Impulsive	If tonal /impulsive noise was identified was 5dB penalty	Comments (ex. main noise sources on site, & extraneous noise ex.

 LA_{10}

37

35

34

35

38

32

23

24

26

26

LA_{max}

78.5

86.4

88.1

89.2

79.4

78.4

87.1

82.5

83

85

No

N4

N5

N6

N7

N8

N4

N5

N6

N7

N8

Daytime

Daytime

Daytime

Daytime

Daytime

Night-time

Night-time

Night-time

Night-time

Night-time

 LA_{eq}

56

60

57

64

65

46

46

40

53

44

 LA_{90}

54

60

54

57

59

46

36

35

37

36

SELECT

Occasional traffic,

aircraft, birdsong, leaf

rustle, distant

motorway

N/A

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

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

Any additional comments? (less than 200 words)

Yes

Resource Usage/Energy efficiency summary	Lic No:	W0129-02	Year

			Additional information
			No formal audit
			completed; ongoing
			monitoring and
			management of
			energy use by
1	When did the site carry out the most recent energy efficiency audit? Please list the recommendations in table 3 below	Enter date of audit	licensee.
	SEAI - Large		
	Is the site a member of any accredited programmes for reducing energy usage/water conservation such Industry Energy		
2	as the SEAI programme linked to the right? If yes please list them in additional information Network (LIEN)	No	
	Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in		
3	additional information	SELECT	NOT APPLICABLE

Table R1 Energy usage	e on site			
			Production +/- %	Energy
			compared to	Consumption +/- %
			previous reporting	vs overall site
Energy Use	Previous year	Current year	year**	production*
Total Energy Used (MWHrs)	23.5	19.0	31%	
Total Energy Generated (MWHrs)				
Total Renewable Energy Generated (N	IWHrs)			
Electricity Consumption (MWHrs)	23.4	18.7	-20%	
Fossil Fuels Consumption:				
Heavy Fuel Oil (m3)	12.6	24.3	92%	
Light Fuel Oil (m3)				
Natural gas (m3)				
Coal/Solid fuel (metric tonnes)				
Peat (metric tonnes)				
Renewable Biomass				
Renewable energy generated on site				

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

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

Table R2 Water usage on site					Water Emissions	Water Consumption	
						Volume used i.e not	
			Production +/- %	Energy		discharged to	
			compared to	Consumption +/- %	Volume Discharged	environment e.g.	
	Water extracted	Water extracted	previous reporting	vs overall site	back to	released as steam	
Water use	Previous year m3/yr.	Current year m3/yr.	year**	production*	environment(m ³ yr):	m3/yr	Unaccounted for Water:
Groundwater							
Surface water							
Public supply	60	60	0%				
Recycled water							
Total							

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

Resource Usage/Energy efficiency summary	Lic No:	W0129-02	Year	2017

** 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)					

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

Complaints and Incidents summary template		Lic No:	W0129-02	Year	2017
Complaints					
		Additional inform	ation		
Have you received any environmental complaints in the current reporting year? If yes please complete summary					
details of complaints received on site in table 1 below	No				

Table	1 Complaints summary						
			Brief description of				
			complaint (Free txt <20	Corrective action< 20			Further
Date	Category	Other type (please specify)	words)	words	Resolution status	Resolution date	information
	SELECT				SELECT		
	SELECT				SELECT		
	SELECT				SELECT		
	SELECT				SELECT		
	SELECT				SELECT		
Total complaints							
open at start of							
reporting year							
Total new							
complaints							
received during							
reporting year							
Total complaints							
closed during							
reporting year							
Balance of							
complaints end of							
reporting year							

Incidents						
				Additional information		
Have any incidents occurred on site in the current report						
year in Tab	Yes					

What is an incident

*For information on how to report and what

constitutes an incident

Table 2 Incidents sur	nmary		1											
			Incident category*please			Other cause(please	Activity in progress at time			Corrective action<20	Preventative action <20		Resolution	Likelihood of
Date of occurrence	Incident nature	Location of occurrence	refer to guidance	Receptor	Cause of incident	specify)	of incident	Communication	Occurrence	words	words	Resolution status	date	reoccurence
18.01.17	Breach of ELV	Other location - BH-11A	1. Minor	No Uncontrolled release	Not related to site activities	Agricultural	Normal activities	EPA	Recurring	None	None	Complete	18.01.17	Medium
18.01.17	Breach of ELV	Other location - SW1	1. Minor	No Uncontrolled release	Not related to site activities	Agricultural	Normal activities	EPA	New	None	None	Complete	18.01.17	Medium
16.03.17	Trigger level reached	Other location Active Cell, C4	2. Limited	No Uncontrolled release	Other	Level 1 sampling unrepresentative of materials presented for disnosal to facility	Normal activities	FPA	New	Removal of material from site to appropriate disposal facility	Material isolated in cell. Material covered with HDPE liner. Sampling of surface water and leachate in cell (non- routine).	Ongoing	Apr-18	low

Complaints and	Incidents summary templat	te			Lic No:	W0129-02		Year	2017					
30.08.17	Other - Breach of WAC	Other location Active Cell, C5	1. Minor	No Uncontrolled release	Other	Breach of WAC criteria by contractor.	Normal activities	EPA	New	Removal of material from site to appropriate disposal facility	Query Questionnaire updated to include a question regrading the suspicion or presence of asbestos material in incoming loads to the facility.	Complete	19.09.17	Low
Total number of incidents current vear	4		·											
Total number of incidents previous year	9	1												
% reduction/ increase	-55%													

WASTE SUMMARY	Lic No:	W0129-02	Year	2017
 SECTION A-PRTR ON SITE WASTE TREATMENT AND WASTE TRANSFERS TAB- TO BE COMPLETED BY ALL IF	PPC AND WASTE FACILITIES	PRTR facility logon	dropdowr	n list click to see options



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

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

Licenced annual	EWC code	Source of waste accepted	Description of waste	Quantity of waste	Quantity of waste accepted in previous	Reduction/	Reason for	Packaging Content (%)-	Disposal/Recovery or treatment	Quantity of	Comments -
tonnage limit for your			accepted	accepted in current	reporting year (tonnes)	Increase over	reduction/ increase	only applies if the waste	operation carried out at your	waste remaining	
site (total			Please enter an accurate	reporting year (tonnes)		previous year +/ -	from previous	has a packaging	site and the description of this	on site at the	
tonnes/annum)			and detailed description			%	reporting year	component	operation	end of reporting	
			- which applies to							year (tonnes)	
			relevant EWC code								
	European Waste Catalogue EWC codes		European Waste								
			Catalogue EWC codes								
				5,140.00	14,325.92	-64%	Market demand	0%	D5- Specially engineered landfill	0	
		17- CONSTRUCTION AND									
		DEMOLITION WASTES									
		(INCLUDING EXCAVATED SOIL									
500,000	170101	FROM CONTAMINATED SITES)	Concrete								
				317.00	288.02		Market demand	0%	D5- Specially engineered landfill	0	
		17- CONSTRUCTION AND									
		DEMOLITION WASTES									
		(INCLUDING EXCAVATED SOIL									
500,000	17 02 02	FROM CONTAMINATED SITES)	Glass	42.004.00	442 524 40	10%	March at all so and		DE Contrali antica di antici		
				42,094.00	143,531.48		Market demand	0%	DS- Specially engineered landfill	0	
		17- CONSTRUCTION AND									
		DEMOLITION WASTES									
500.000	17.05.04	(INCLUDING EXCAVATED SUL	Coll and Chana			70%					
500,000	17 03 04	FROM CONTAMINATED SITES)	son una storie	7 197 00	1 886 06	-70%	Market demand	0%	D5- Specially engineered landfill	0	
		19- WASTES EROM WASTE		7,157.00	1,880.00		ivia ket dellianu	078	bo- specially engineered landin	0	
		MANAGEMENT FACILITIES									
		OFE-SITE WASTE WATER									
		TREATMENT PLANTS AND THE									
		PREPARATION OF WATER									
		INTENDED FOR HUMAN									
		CONSUMPTION AND WATER	Sludges from water								
500.000	19 09 02	FOR INDUSTRIAL USE	clarification			281%					

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

Y	'es	
_		
Y	'es	

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

WASTE SUMMARY

6 Does your facility have relevant nuisance controls in place? 7 Do you have an odour management system in place for your facility? If no why? 8 Do you maintain a sludge register on site?

ON D-TO BE COMPLETED BY LANDFILL SITES ONLY

Table 2 Waste type	e and tonnage-landfill only			
Waste types permitted for disposal	Authorised/licenced annual intake for disposal (tpa)	Actual intake for disposal in reporting year (tpa)	Remaining licensed capacity at end of reporting year (m3)	Comments
Inert Waste	500,000	54,747		
			3,967,742	

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 SELECT UNIT	Lined disposal area occupied by waste SELECT UNIT	Unlined area SELECT UNIT	Comments on liner type
												0 (further areas of	
												quarry to be	Inert landfill
						Dependant on						developed as lined	liner in
						input and						cells in line with	accordance
						relevant planning						phased restoration	with Landfill
W0129-02 Cell 4B	2003	Ongoing	Yes	Private	Inert	requirements	No	No	No			of the site).	Directive 1999

SELECT

W0129-02

Lic No:

Table 4 Environmental monitoring-landfill only Landfill Manual-Monitoring Standards

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

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

Table 5 Capping-Landfill only

				Area with waste that		
Area uncapped*	Area with temporary cap			should be permanently		
CELECT UNIT	CELECT UNIT	Area with final cap to LD		capped to date under		
SELECT UNIT	SELECT UNIT	Standard m2 ha, a	Area capped other	licence	What materials are used in the cap	Comments
		3600m2	n/a	n/a	Subsoil and topsoil	
*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

Volume of leachate in		Leachate (COD) mass load	Leachate (NH4) mass	Leachate (Chloride)		Specify type of	
reporting year(m3)	Leachate (BOD) mass load (kg/annum)	(kg/annum)	load (kg/annum)	mass load kg/annum	Leachate treatment on-site	leachate treatment	Comments

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

Table 7 Landfill Gas-Landfill only

			Was surface emissions	
			monitoring performed	
Gas Captured&Treated			during the reporting	
by LFG System m3	Power generated (MW / KWh)	Used on-site or to national grid	year?	Comments
			SELECT	

Year

2017

Environmental Protection Agency

| PRTR# : W0129 | Facility Name : Integrated Materials Solutions Limited Partnership | Filename : W0129_2017 PRTR.xls | Return Year : 2017 |

29/03/2018 13:59

Guidance to completing the PRTR workbook

PRTR Returns Workbook

 REFERENCE YEAR
 2017

 1. FACILITY IDENTIFICATION
 Parent Company Name
 Integrated Materials Solutions Limited Partnership

 Facility Name
 Integrated Materials Solutions Limited Partnership

 PRTR Identification Number
 W0129

 Licence Number
 W0129-02

Classes of Activity

No. class_name - Refer to PRTR class activities below

Address 1	Hollywood Great
Address 2	Nags Head
Address 3	The Naul
Address 4	
	Dublin
Country	Ireland
Coordinates of Location	-9.09708 52.6126
River Basin District	IEEA
NACE Code	3900
Main Economic Activity	Remediation activities and other waste management services
AER Returns Contact Name	Kerstie Flanagan
AER Returns Contact Email Address	kerstief@pateltonra.com
AER Returns Contact Position	Environmental Consultant
AER Returns Contact Telephone Number	01 8020527
AER Returns Contact Mobile Phone Number	01 8020257
AER Returns Contact Fax Number	01 8020525
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	4
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name								
5(d)	Landfills								
5(d)	Landfills								
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-									

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

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE PRT# : W0129 Facility Name : Integrated Materials Solutions Limited Partnership Filename : W0129_2017 PRTR.xks Return Year : 2017 Please enter all quantities on this sheet in Tonnes											29/03/2018 13:59 3	
Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	M/C/E	Method Used	Location of Treatment	<u>Haz Waste</u> : Name and Lecence/Permit No of Next Destination Facility <u>Non</u> <u>Haz Waste</u> : Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility <u>Non Haz Waste</u> : 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)
									•	Beauparc.Navan.Co.	•	•
Within the Country	20 03 01	No	0.1	mixed municipal waste	D15	С	Volume Calculation	Offsite in Ireland	Panda,W0140-03	Meath,0,Ireland Beauparc,Navan,Co.		
Within the Country	20 03 01	No	0.06	mixed municipal waste	R3	С	Volume Calculation	Offsite in Ireland	Panda,W0140-03	Meath,0,Ireland		

* 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