SELECT	cells that are highlighted blue contain a dropdown menu click to select one option from the list
guidance document link	cells that contain underlined text click to access relevant guidance documents for this section
Table heading *	table headings followed by a symbol have an associated footnote or instructions
Cells with red indicator in top right corner	cells that have a red indicator in the top right corner contain a comment box with further instructions or clarification

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

Facility Information Summary

AER Reporting Year Licence Register Number Name of site Site Location NACE Code Class/Classes of Activity National Grid Reference (6E, 6 N)

A description of the activities/processes at the site for the reporting year. This should include information such as production increases or decreases on site, any infrastructural changes, environmental performance which was measured during the reporting year **and an overview of compliance with your licence** <u>listing all</u> <u>exceedances of licence limits (where</u> <u>applicable) and what they relate to e.g. air,</u> <u>water, noise.</u> 2014 W0048-01 Marrakesh Ltd. Kimurry South Landfill, Kilmurry South, Kilmacanogue, Bray, Co. 3821 D1, D15, R3, R5, R13 53.1506, -6.13329

C&D materials (e.g. Soil & Stones, Concrete, Bituminous Mixtures) are accepted at the facility for screening, segregation, sorting and grading and sold as product for re-use purposes.

During 2014, no material was landfilled at the facility. Any materials which were not sold from the facility are temporarily stored on site pending sale.

There were no infrastructural or other significant changes during the reporting year.

Annual monitoring was conducted for: noise, LF gas, dust, surface water and groundwater. Noise - compliant; LF gas -CH4 - compliant, reference limit value exceeded for CO2; dust - compliant; surface water - pH was marginally in exceedance of limit values in SW-2; groundwater - non-compliances for Nickel and PAHs in BH-3.

Declaration:

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

Environmental Consultant, Patel Tonra Ltd. 30/03/2015

Date

(or nominated, suitably qualified and experienced deputy)

	AIR-summary template	Lic No:	W0048-01	Year	2014
1	Answer all questions and complete all tables where relevant Does your site have licensed air emissions? If yes please complete table A1 and A2 below for the current reporting year and answer further questions. If you do not have licenced emissions and do not complete a solvent management plan (table A4 and A5) you <u>do not</u> need to complete the tables	No	Add Dust deposition monit monitoring locations in the EPA Waste Licence	ditional information oring was conducted at two n Sep-Oct 2014 - results were below limit value of 350 mg/m2/day.	
	Periodic/Non-Continuous Monitoring				
2	Are there any results in breach of licence requirements? If yes please provide brief details in the comment section of TableA1 below	SELECT			

 ³ Was all monitoring carried out in accordance with EPA guidance note AG2 and using the basic air monitoring checklist?

of		
	SELECT	
	SELECT	

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

										Comments -
										reason for
										change in %
										mass load
										from
			ELV in licence or							previous
Emission		Frequency of	any revision			Unit of	Compliant with		Annual mass	year if
reference no:	Parameter/ Substance	Monitoring	therof	Licence Compliance criteria	Measured value	measurement	licence limit	Method of analysis	load (kg)	applicable
	CELECT.			CELECT.		CELECT.	CELECT			
	SELECT			SELECT		SELECT	SELECT	SELECT		
	SELECT			SELECT		SELECT	SELECT	SELECT		
										1
	SELECT			SELECT		SELECT	SELECT	SELECT		
	SELECT			SELECT		SELECT	SELECT	SELECT		

AGN2

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

	AIR-summary template	Lic No:	W0048-01	Year	2014
	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)	<u> </u>			_
5	Did continuous monitoring equipment experience downtime? If yes please record downtime in table A2 below	SELECT			
6	Do you have a proactive service agreement for each piece of continuous monitoring equipment?	SELECT			
7	Did your site experience any abatement system bypasses? If yes please detail them in table A3 below Table A2: Summary of average emissions -continuous monitoring	SELECT]

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

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

Table A3: Abatement system bypass reporting table Bypass protocol

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

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

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

	AIR-summary	template				Lic No:	W0048-01		Year	2014		
	Solvent	use and manageme	nt on site									
8	Do you have a total Emission Limit Value of direct and fugitive emissions on site? if yes please fill out tables A4 and A5 No											
	Table A4: Solv Total VOC Emi	ent Management Pla ssion limit value	an Summary	<u>Solvent</u> regulations	Please refer to linked solver complete table 5	nt regulations to and 6			1			
Reporting year Total solvent input on site (kg) Total VOC emissions to Air from entire site (direct and fugitive)			Total VOC emissions as %of solvent input	Total Emission Limit Value (ELV) in licence or any revision therof	Compliance							
-						SELECT	-					
ľ	Table 45:	Solvent Mass Balan	ce summary			SELECT						
		(I) Inputs (kg)			(0)	Outputs (kg)						
Ī	Solvent	(I) Inputs (kg)	Organic solvent emission in waste	Solvents lost in water (kg)	Collected waste solvent (kg)	Fugitive Organic Solvent (kg)	Solvent released in other ways e.g.	Solvents destroyed onsite through	Total emission of Solvent to air (kg)			
							Total					

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)		Lic No:	W0048-01		Year	2014
			Additional information		-	
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		Patel Tonra Ltd. 2014. Samples v SW-1 and SW-3 compliance with of the Surface V Regulations (19 conditions.	. conducted sampling of surface w were obtained from surface water were dry at the time of sampling. In reference limit values. pH was n Vater Regulatios (2009) and the S 88) limit value in SW-2, indicating	ter on 2 September monitoring point SW-2. Results were largely in arginally in exceedance Imonid Water lightly alkaline water		
	No					
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 <u>only any evidence of contamination noted during visual inspections</u>	No		No requirement to complete Ta	ble W2		
Table W1 Storm water monitoring						

6

Location reference	Location relative to site activities	PRTR Parameter	Licenced Parameter	Monitoring date	ELV or trigger level in licence or any revision thereof*	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Comments
	SELECT	SELECT	SELECT			SELECT		SELECT	SELECT	
	SELECT	SELECT	SELECT			SELECT		SELECT	SELECT	

*trigger values may be agreed by the Agency outside of licence conditions

Table W2 Visual inspections-Please only enter details where contamination was observed.

F	Location Reference	Date of inspection	Description of contamination	Source of contamination	Corrective action	Comments
			NOT APPLICABLE	SELECT		
				SELECT		

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

3	Was there any result in breach of licence requirements? If y comment section of Table Was	es please provide br below	ief details in the	SELECT	NOT APPLICABLE
	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	<u>checklist</u>	results checklist	SELECT	

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

Emission reference no:	Emission released to	Parameter/ SubstanceNote 1	Type of sample	Frequency of monitoring	Averaging period	ELV or trigger values in licence or any revision therof ^{Note 2}	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Method of analysis	Procedural reference source	Procedural reference standard number	Annual mass load (kg)	Comments
	SELECT	SELECT	SELECT		SELECT		SELECT		SELECT	SELECT	SELECT	SELECT			

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

Note 2: Where Emission Limit Values (ELV) do not apply to your licence please compare results against EQS for Surface water or relevant receptor quality standards

	AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)	Lic No:	W0048-01	Year	2014
1					

	Continuous monitoring		Additional Information
5	Does your site carry out continuous emissions to water/sewer monitoring?	No	
	If yes please summarise your continuous monitoring data below in Table W4 and compare it to its relevant Emission Limit Value (ELV)		
6	Did continuous monitoring equipment experience downtime? If yes please record downtime in table W4 below	SELECT	NOT APPLICABLE
7	Do you have a proactive service contract for each piece of continuous monitoring equipment on site?	SELECT	NOT APPLICABLE
8	Did abatement system bypass occur during the reporting year? If yes please complete table W5 below	SELECT	NOT APPLICABLE
	Table W4: Summary of average emissions -continuous monitoring		

Table W4: Summary of average emissions -continuous monitoring

			ELV or trigger values in licence					% change +/- from previous reporting	Monitoring	Number of ELV	
Emission	Emission		or any revision	Averaging	Compliance	Units of	Annual Emission for current	year	Equipment	exceedences in	
reference no:	released to	Parameter/ Substance	thereof	Period	Criteria	measurement	reporting year (kg)		downtime (hours)	reporting year	Comments
NOT APPLICABLE	SELECT	SELECT		SELECT	SELECT	SELECT					
	SELECT	SELECT		SELECT	SELECT	SELECT					

7

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?	
NOT APPLICABLE						SELECT	

*Measures taken or proposed to reduce or limit bypass frequency

Bund/Pipeline test	ting template				Lic No:	W0048-01		Year	2014					I
	1													_
Bund testing		dropdown menu cli	ick to see options				Additional information	Т						
							Eval is stared in a double skinned							
							tank within a motal container							
Are you required by you	ur licence to undertake in	tegrity testing on bunds and cont	tainment structures ? if yes pl	lease fill out table B1 below	listing all new bunds and		Marrakesh Ltd. consider that the							
containment structures	s on site, in addition to all	bunds which failed the integrity	test-all bunding structures w	hich failed including mobile	e bunds must be listed in		tank's location on site, and within a							
the table below, <u>please</u>	e include all bunds outside	e the licenced testing period (mol	bile bunds and chemstore inc	luded)			container unit are adequate							
							mitigation against potential							
							vehicular damage. Bund testing not							
1						Yes	applicable in this instance.							
2 Please provide integrity	y testing frequency period					SELECT		Ť						
Does the site maintain	a register of bunds, unde	rground pipelines (including storr	mwater and foul). Tanks. sum	ps and containers? (contair	ners refers to "Chemstore"			1						
3 type units and mobile b	ounds)					SELECT								
4 How many bunds are or	n site?							1						
5 How many of these bun	nds have been tested with	in the required test schedule?						1						
6 How many mobile bund	ds are on site?							Ι						
7 Are the mobile bunds in	ncluded in the bund test s	chedule?				SELECT		Ι						
8 How many of these mol	bile bunds have been test	ed within the required test schee	dule?					1						
9 How many sumps on sit	te are included in the inte	grity test schedule?						1						
10 How many of these sum	mps are integrity tested w	ithin the test schedule?				L		1						
Please list any sump int	tegrity failures in table B1	L					_	-						
11 Do all sumps and chamb	bers have high level liquic	l alarms?				SELECT		-						
12 If yes to Q11 are these f	failsafe systems included	in a maintenance and testing pro	ogramme?			SELECT		-						
13 Is the Fire Water Retent	tion Pond included in you	r integrity test programme?				SELECT		1						
7-14	In D1: Commence datails of	hand (an atolic second star star is the		٦										
Tabi	e bi. Summary details of	bund /containment structure int	egnty test									1	1	
														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		
* Canacity required should comr	DELECT	rule as detailed in your licence				JELECT	Commentary		JELECI	SELECT		JELECI		
Has integrity testing be	en carried out in accorda	nce with licence requirements an	d are all structures tested in				connicituity	Т						
15 line with BS8007/EPA G	Guidance?			bunding and storage guideli	ines_	SELECT								
16 Are channels/transfer s	systems to remote contain	ment systems tested?				SELECT		1						
17 Are channels/transfer s	systems compliant in both	integrity and available volume?				SELECT								
		ī												
Pipeline/undergrou	und structure testing	1						т						
Are you required by you	ur licence to undertake in	tegrity testing* on underground a	structures e a ninelines or su	mos etc 2 if yes please fill o	ut table 2 below licting all									
1 underground structures	s and pipelines on site wh	ich failed the integrity test and a	Il which have not been tester	d withing the integrity test	neriod as specified	SELECT								
2 Please provide integrity	v testing frequency period	ich falled the integrity test and a	in which have not been tested	a withing the integrity test	periou as specifieu	SELECT		+						
*please note integrity to	testing means water tight	ness testing for process and foul i	pipelines (as required under v	vour licence)		SEECO		1						
Table	B2: Summary details of p	ipeline/underground structures in	ntegrity test									_		
												1		
												1		
				Type of secondary										
				containment				Integrity test				1		
			Does this structure have			Integrity reports		failure explanation	Corrective action	Scheduled date	Results of retest/if in current	1		
Structure ID	Type system	Material of construction	Secondary containment?		Type integrity testing	maintained on site?	Results of test	<50 words	taken	for retest	reporting year)	1		
Structure ID	SFLECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	-50 WOIDS	CONCIL	ioi Tetest	SELECT	1		
				JELCI	SECCI				1			1		
	1				1				1	1		1		

8

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

Groundwater/Soil monitoring template

Lic No:

W0048-01

2014

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 the
2 Are you required to carry out soil monitoring as part of your licence requirements?	no		interpretation box below or if you require additional space please
³ Do you extract groundwater for use on site? If yes please specify use in comment section	no		include a groundwater/contaminated land monitoring results interpretaion as an additional section in this AER
Do monitoring results show that groundwater generic assessment criteria such as GTVs or IGVs are exceeded or is there an upward 4 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		
5 Is the contamination related to operations at the facility (either current and/or historic)	SELECT	NOT APPLICABLE	
6 Have actions been taken to address contamination issues? If yes please summarise		NOT APPLICABLE	
remediation strategies proposed/undertaken for the site	SELECT	NOT APPLICABLE	
7 Please specify the proposed time frame for the remediation strategy	SELECT	NOT APPLICABLE	
8 Is there a licence condition to carry out/update ELRA for the site?	SELECT	NOT APPLICABLE	
9 Has any type of risk assesment been carried out for the site?	SELECT	NOT APPLICABLE	
10 Has a Conceptual Site Model been developed for the site?	SELECT	NOT APPLICABLE	Analytical results were compared against the Groundwater Regulations
11 Have potential receptors been identified on and off site?	SELECT	NOT APPLICABLE	2010. Results were generally in compliance with relevant guideline limit
12 Is there evidence that contamination is migrating offsite?	SELECT	NOT APPLICABLE	values. There were non-compliances for Nickel and PAHs in BH-3.

Table 1: Upgradient Groundwater monitoring results

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration++	Average Concentration+	unit	GTV's*	SELECT**	Upward trend in pollutant concentration over last 5 years of monitoring data
02/09/2014	BH-6	Aluminium	Lab analysis	Annually	0.026	0.026	mg/l	0.15		No
02/09/2014	BH-6	Ammoniacal Nitrogen	Lab analysis	Annually	<0.2	<0.2	mg/l	0.18		No
02/09/2014	BH-6	Arsenic	Lab analysis	Annually	< 0.0001	< 0.0001	mg/l	0.008		No
02/09/2014	BH-6	Barium	Lab analysis	Annually	0.014	0.014	mg/l	-		No
02/09/2014	BH-6	Boron	Lab analysis	Annually	0.02	0.02	mg/l	0.75		No
02/09/2014	BH-6	Cadmium	Lab analysis	Annually	< 0.0001	< 0.0001	mg/l	0.004		No
02/09/2014	BH-6	Calcium	Lab analysis	Annually	2.83	2.83	mg/l	-		No
02/09/2014	BH-6	Chloride	Lab analysis	Annually	11.6	11.6	mg/l	-		No
02/09/2014	BH-6	Chromium	Lab analysis	Annually	< 0.003	< 0.003	mg/l	0.038		No
02/09/2014	BH-6	Copper	Lab analysis	Annually	0.0021	0.0021	mg/l	1.5		No
02/09/2014	BH-6	Cyanide	Lab analysis	Annually	<0.05	<0.05	mg/l	0.04		No
02/09/2014	BH-6	Electrical conductivity	On-site analysis	Annually	0.09	0.09	mS/cm	-		No
02/09/2014	BH-6	Faecal Coliforms	Lab analysis	Annually	4	4	cfus/ 100ml	-		No
02/09/2014	BH-6	Fluoride	Lab analysis	Annually	<0.5	<0.5	mg/l	-		No

Groundwater/	Soil monitoring	g templa	te		Lic No:	W0048-01		Year	2014	
02/09/2014 BH-	I-6 Groun Level	dwater	On-site analysis	Annually	6.45	6.45	m bgl	-		No
02/09/2014 BH-	I-6 Iron		Lab analysis	Annually	<0.019	< 0.019	mg/l	-		No
02/09/2014 BH-	I-6 Kielda	hl	Lab analysis	Annually	<1	<1	mg/l	-		No
- , , -	Nitrog	en	,				0,			
02/09/2014 BH-	I-6 Lead	-	Lab analysis	Annually	0.0004	0.0004	mg/l	0.019		No
02/09/2014 BH-	I-6 Magne	esium	Lab analysis	Annually	2.15	2.15	mg/l	-		No
02/09/2014 BH-	I-6 Manga	anese	Lab analysis	Annually	0.016	0.016	mg/l	-		No
02/09/2014 BH-	I-6 Mercu	iry	Lab analysis	Annually	0.0002	0.0002	mg/l	0.0008		No
02/09/2014 BH-	I-6 Minera	al Oils	Lab analysis	Annually	< 0.01	<0.01	mg/l	-		No
02/09/2014 BH-	I-6 Nickel		Lab analysis	Annually	0.0011	0.0011	mg/l	0.015		No
02/09/2014 BH-	I-6 Nitrate	e	Lab analysis	Annually	8.5	8.5	mg/l	37.5		No
02/09/2014 BH-	I-6 Nitrite	9	Lab analysis	Annually	< 0.05	<0.05	mg/l	-		No
02/09/2014 BH-	I-6 Ortho	phosphat	Lab analysis	Annually	< 0.05	<0.05	mg/l	-		No
	e						_			
02/09/2014 BH-	I-6 pH		Lab analysis	Annually	5.9	5.9	pH units	-		No
02/09/2014 BH	I-6 Phosp	horous,	Lab analysis	Annually	<0.020	<0.020	mg	-		No
	Total		,				Ĭ			
02/09/2014 BH-	I-6 PAHs ((16)	Lab analysis	Annually	<0.0003	< 0.0003	mg/l	0.00008		No
02/09/2014 BH-	I-6 Potass	sium	Lab analysis	Annually	<1.00	<1.00	mg/l	-		No
02/09/2014 BH	I-6 Selenii	um	Lab analysis	Annually	< 0.0004	< 0.0004	mg/l	-		No
02/09/2014 BH-	I-6 Silver		Lab analysis	Annually	<0.0015	<0.0015	mg/l	-		No
02/09/2014 BH-	I-6 Sodiur	n	Lab analysis	Annually	6.95	6.95	mg/l	-		No
02/09/2014 BH-	I-6 Sulpha	ate	Lab analysis	Annually	6.9	6.9	mg/l	187.5		No
02/09/2014 BH-	I-6 Total A	Alkalinity	Lab analysis	Annually	9	9	mg/l	-		No
02/09/2014 BH-	I-6 Total C	Coliforms	Lab analysis	Annually	9	9	cfus/ 100ml	-		No
02/09/2014 BH-	I-6 Total C	Organic	Lab analysis	Annually	<3	<3	mg/l	-		No
	Carbo	n								
02/09/2014 BH-	I-6 Total C	Oxidised	Lab analysis	Annually	1.9	1.9	mg/l	-		No
	Nitrog	gen								
02/09/2014 BH-	I-6 Total S	Solids	Lab analysis	Annually	185	185	mg/l	-		No
02/09/2014 BH-	I-6 Zinc		Lab analysis	Annually	0.014	0.014	mg/l	-		No
02/09/2014					0	0		0		
02/09/2014 BH	I-2 Alumir	nium	Lab analysis	Annually	< 0.003	< 0.003	mg/l	0.15		No
02/09/2014 BH-	I-2 Ammo Nitrog	oniacal gen	Lab analysis	Annually	<0.2	<0.2	mg/l	0.18		No
02/09/2014 BH-	I-2 Arseni	ic	Lab analysis	Annually	<0.0001	< 0.0001	mg/l	0.008		No
02/09/2014 BH	I-2 Bariun	n	Lab analysis	Annually	0.019	0.019	mg/l	-		No
02/09/2014 BH	I-2 Boron		, Lab analysis	Annually	0.019	0.019	mg/l	0.75		No
02/09/2014 BH	I-2 Cadmi	ium	, Lab analysis	Annually	< 0.0001	<0.0001	mg/l	0.004		No
02/09/2014 BH	I-2 Calciu	m	Lab analysis	Annually	111	111	mg/l	-		No
02/09/2014 BH	I-2 Chlorid	de	, Lab analysis	Annually	12	12	mg/l	-		No
02/09/2014 BH	I-2 Chrom	nium	Lab analysis	Annually	< 0.003	< 0.003	mg/l	0.038		No
02/09/2014 BH	I-2 Coppe	er	Lab analysis	Annually	0.0034	0.0034	mg/l	1.5		No
02/09/2014 BH	I-2 Cyanid	de	Lab analysis	Annually	<0.05	< 0.05	mg/l	0.04		No
02/09/2014 BH	I-2 Electri	ical	On-site analysis	Annually	0.6	0.6	mS/cm	-		No
	condu	ctivity								

1987/201 BH-2 Faceal Coliforms Lab analysis Annually 22 22 rlus/100mm Lab analysis Annually 0.05 0.05 mpgl No 1997/2014 BH-2 Fiorder de Lab analysis Annually 2.85 2.85 m bgl No 1997/2014 BH-2 Ican de Lab analysis Annually 0.00 0.0008 mgrl 0.0 No 1997/2014 BH-2 Ican de Lab analysis Annually 0.00 0.0008 mgrl 0.0 No 1997/2014 BH-2 Ican danalysis Annually 0.00 0.001 mgrl 0.0 No 1997/2014 BH-2 Ican danalysis Annually 0.001 0.001 mgrl 0.0 No No 1997/2014 BH-2 Ican danalysis Annually 0.001 0.001 mgrl 0.0 No 1997/2014 BH-2 Nicite Ican analysis Annually 0.001 Mgrl No	Groundwat	er/Soil m	nonitoring templa	ite		Lic No:	W0048-01		Year	2014	
U0022014 BH-2 Floring Lab markyis Annualiy 2.65 2.65 mbgl - No U002104 BH-2 Groundwards Constructure Annualiy 2.62 2.65 mbgl - No U002104 BH-2 Kinada Lab analysis Annualiy -0.02 - 0.01 No U002104 BH-2 Idada Lab analysis Annualiy -0.02 - 0.01 No U002104 BH-2 Lead Lab analysis Annualiy 0.000 0.0000 mgl1 - No U002104 BH-2 Maganese Lab analysis Annualiy 0.001 0.001 mgl1 - No U002104 BH-2 Mercary Lab analysis Annualiy 0.001 0.011 mgl1 - No U002104 BH-2 Nicriac Lab analysis Annualiy -0.055 mgl1 - No U002104 BH-2 Nicriac	02/09/2014	BH-2	Faecal Coliforms	Lab analysis	Annually	22	22	cfus/ 100ml	-		No
U20/2014 BH-2 Groundwater Level On-analysis Annually 2.85 2.85 m bgl - No U20/2014 BH-2 Yron Lab analysis Nicogen Annually -60.22 -60.02 mg/l - No V07/2014 BH-2 Kjeldali Lab analysis Annually -0.012 - No V07/2014 BH-2 Kgeldali Lab analysis Annually -0.000 mg/l 0.019 No V07/2014 BH-2 Magnetisk Annually -0.00001 - No No V07/2014 BH-2 Mineral Ois Annually -0.001 - No V17/2014 BH-2 Mineral Ois Lab analysis Annually -0.003 0.003 0.015 No No V17/2014 BH-2 Nirite Lab analysis Annually - C No No V17/2014 BH-2 Pirtisti Annually - - No No No	02/09/2014	BH-2	Fluoride	Lab analysis	Annually	<0.5	<0.5	mg/l	-		No
U92/2014H-2IronUs analysisAnnualy4.0.026.0.02mg/lNo107/2014H-2KeldahLab analysisAnnualy-1-1mg/lNo107/2014H-2LeadLab analysisAnnualy0.00080.0008mg/l0.013No107/2014H-2MagnesiumLab analysisAnnualy0.0010.001mg/lNo107/2014H-2MagnesiumLab analysisAnnualy0.0010.001mg/lNo107/2014H-2MagnesiumLab analysisAnnualy0.0030.003mg/l0.015No107/2014H-2MiccelLab analysisAnnualy0.010.01mg/lNo107/2014H-2NitriteLab analysisAnnualy4.0054.005mg/lNo107/2014H-2OrthophosphiLab analysisAnnualy4.0054.005mg/lNo107/2014H-2PHLab analysisAnnualy4.00034.0003mg/lNo107/2014H-2PHLab analysisAnnualy4.00034.0003mg/lNo107/2014H-2PHLab analysisAnnualy7.27.2PH unitsNo107/2014H-2PHLab analysisAnnualy4.00034.0003mg/lNo107/2014H-2<	02/09/2014	BH-2	Groundwater Level	On-site analysis	Annually	2.85	2.85	m bgl	-		No
U00/201 U00/201 U00/201HP- Ntroger Ntroger NtrogerAnalysis AnalysisAnalysis AnalysisAnalysis AnalysisAnalysis AnalysisAnalysis AnalysisAnalysis AnalysisAnalysis AnalysisAnalysis 	02/09/2014	BH-2	Iron	Lab analysis	Annually	<0.02	<0.02	mg/l	-		No
Vig0/2014 BH-2 Lead Las analysis Annually 0.00008 mg/n 0.019 No Vig0/2014 BH-2 Margenese Lab analysis Annually 0.001 0.0011 mg/n - No Vig0/2014 BH-2 Mercar Usis Lab analysis Annually 0.001 0.001 mg/n 0.001 No Vig0/2014 BH-2 Micrard Usis Lab analysis Annually 0.001 0.001 mg/n 0.015 No Vig0/2014 BH-2 Nicrat Lab analysis Annually 0.013 0.005 mg/n - No Vig0/2014 BH-2 Nitrat Lab analysis Annually 40.055 <0.05	02/09/2014	BH-2	Kjeldahl Nitrogen	Lab analysis	Annually	<1	<1	mg/l	-		No
V09/2014 BH-2 Magnesium Lab analysis Annually 4.01 4.01 mg/l No V09/2014 BH-2 Magnesium Lab analysis Annually 4.000011 4.000011 mg/l No V09/2014 BH-2 Mireard US Lab analysis Annually 0.01 0.01 mg/l No V09/2014 BH-2 Mireard US Lab analysis Annually 0.025 40.05 mg/l - No V09/2014 BH-2 Nitrate Lab analysis Annually <0.05	02/09/2014	BH-2	Lead	Lab analysis	Annually	0.00008	0.00008	mg/l	0.019		No
V09/2014 BH-2 Manganese Lab analysis Annually 0.001	02/09/2014	BH-2	Magnesium	Lab analysis	Annually	4.01	4.01	mg/l	-		No
V09/2014 BH-2 Mecrory Usb analysis Annually <00001 mp/l <. No V09/2014 BH-2 Nickel Lab analysis Annually 0.003 0.003 mg/l 0.015 No V09/2014 BH-2 Nitrate Lab analysis Annually 0.035 4.005 mg/l . No V09/2014 BH-2 Nitrate Lab analysis Annually <0.05	02/09/2014	BH-2	Manganese	Lab analysis	Annually	0.001	0.001	mg/l	-		No
V[09]2014 BH-2 Mineral Olis Lab analysis Annually 0.01 0.01 mg/l - No V[09]2014 BH-2 Nitrate Lab analysis Annually 0.003 0.003 mg/l 0.015 No V[09]2014 BH-2 Nitrate Lab analysis Annually -0.05 <0.05	02/09/2014	BH-2	Mercury	Lab analysis	Annually	< 0.00001	< 0.00001	mg/l	0.0008		No
V09/2014 BH-2 Nickel Lab analysis Annually 0.003 0.003 mg/l 0.015 No V09/2014 BH-2 Nitrite Lab analysis Annually <0.05	02/09/2014	BH-2	Mineral Oils	Lab analysis	Annually	0.01	0.01	mg/l	-		No
V[90]/2014 BH-2 Nitrate Lab analysis Annually 1.2 1.2 mg/l 37.5 No V[93]/2014 BH-2 Nitrite Lab analysis Annually <0.05	02/09/2014	BH-2	Nickel	Lab analysis	Annually	0.003	0.003	mg/l	0.015		No
V[07]2014 BH-2 Nitrite Lab analysis Annually <0.05 <0.05 mg/l · No V[09]2014 BH-2 Orthophosphat Lab analysis Annually <0.05	02/09/2014	BH-2	Nitrate	Lab analysis	Annually	1.2	1.2	mg/l	37.5		No
V(9)/2014 BH-2 Orthophosphat Lab analysis Annually <0.05 <0.05 mg/l - No V(9)/2014 BH-2 PH Lab analysis Annually 7.2 7.2 pH units - No V(9)/2014 BH-2 Phosphorus Lab analysis Annually 0.212 0.212 mg - No V(9)/2014 BH-2 PAHs (16) Lab analysis Annually <0.003	02/09/2014	BH-2	Nitrite	Lab analysis	Annually	<0.05	< 0.05	mg/l	-		No
V/9/2014 BH-2 pH Lab analysis Annually 7.2 7.2 pH units . No V/9/2014 BH-2 Phosphorous, Total Lab analysis Annually 0.212 0.212 mg . No V/9/2014 BH-2 PAtks (16) Lab analysis Annually <0.0003	02/09/2014	BH-2	Orthophosphat e	Lab analysis	Annually	<0.05	<0.05	mg/l	-		No
V/09/2014 BH-2 Phosphorous, Total Lab analysis Annually Annually 0.212 0.212 mg - No V/09/2014 BH-2 PAHS (16) Lab analysis Annually <0.0003	02/09/2014	BH-2	рН	Lab analysis	Annually	7.2	7.2	pH units	-		No
V(9/2014 BH-2 PAHs (16) Lab analysis Annually <0.0003 <0.0003 mg/l 0.0008 No V(9/2014 BH-2 Potassium Lab analysis Annually <1.0	02/09/2014	BH-2	Phosphorous, Total	Lab analysis	Annually	0.212	0.212	mg	-		No
	02/09/2014	BH-2	PAHs (16)	Lab analysis	Annually	< 0.0003	< 0.0003	mg/l	0.00008		No
V09/2014 BH-2 Selenium Lab analysis Annually <0.0004 <0.0004 mg/l - No V09/2014 BH-2 Soliver Lab analysis Annually <0.0015	02/09/2014	BH-2	Potassium	Lab analysis	Annually	<1.0	<1.0	mg/l	-		No
V09/2014 BH-2 Silver Lab analysis Annually <0.0015 <0.0015 mg/l - No V09/2014 BH-2 Sodium Lab analysis Annually 7.6 7.6 mg/l - No V09/2014 BH-2 Sulphate Lab analysis Annually 10.9 10.9 mg/l 187.5 No V09/2014 BH-2 Total Alkalinity Lab analysis Annually 325 325 mg/l - No V09/2014 BH-2 Total Organic Lab analysis Annually 24 24 cfus/100ml - No V09/2014 BH-2 Total Organic Lab analysis Annually 0.28 0.28 mg/l - No V09/2014 BH-2 Total Oxidised Lab analysis Annually 0.28 0.28 mg/l - No V09/2014 BH-2 Total Solids Lab analysis Annually 0.042 0.042 mg/l -	02/09/2014	BH-2	Selenium	Lab analysis	Annually	< 0.0004	< 0.0004	mg/l	-		No
//09/2014 BH-2 Sodium Lab analysis Annually 7.6 7.6 mg/l No //09/2014 BH-2 Sulphate Lab analysis Annually 10.9 10.9 mg/l 187.5 No //09/2014 BH-2 Total Alkalinity Lab analysis Annually 325 325 mg/l - No //09/2014 BH-2 Total Coliforms Lab analysis Annually 24 24 cfus/100ml - No //09/2014 BH-2 Total Organic Carbon Lab analysis Annually <3	02/09/2014	BH-2	Silver	Lab analysis	Annually	< 0.0015	<0.0015	mg/l	-		No
V09/2014 BH-2 Sulphate Lab analysis Annually 10.9 10.9 mg/l 187.5 No V(09/2014 BH-2 Total Alkalinity Lab analysis Annually 325 325 mg/l - No V(09/2014 BH-2 Total Coliforms Lab analysis Annually 24 24 cfus/100ml - No V(09/2014 BH-2 Total Organic Carbon Lab analysis Annually <3	02/09/2014	BH-2	Sodium	Lab analysis	Annually	7.6	7.6	mg/l	-		No
V09/2014 BH-2 Total Alkalinity Lab analysis Annually 325 325 mg/l - No V09/2014 BH-2 Total Coliforms Lab analysis Annually 24 24 cfus/100ml - No V09/2014 BH-2 Total Origanic Carbon Lab analysis Annually <3	02/09/2014	BH-2	Sulphate	Lab analysis	Annually	10.9	10.9	mg/l	187.5		No
y/09/2014 BH-2 Total Coliforms Lab analysis Annually 24 24 cfus/ 100ml - No y/09/2014 BH-2 Total Organic Lab analysis Annually <3	02/09/2014	BH-2	Total Alkalinity	Lab analysis	Annually	325	325	mg/l	-		No
H-2Total Organic CarbonLab analysisAnnually<3<3mg/l-No//09/2014BH-2Total Oxidised NitrogenLab analysisAnnually0.280.28mg/l-No//09/2014BH-2Total SolidsLab analysisAnnually733733mg/l-No//09/2014BH-2Total SolidsLab analysisAnnually733733mg/l-No//09/2014BH-2ZincLab analysisAnnually0.0420.0042mg/l-No//09/2014BH-3AluminiumLab analysisAnnually<0.003	02/09/2014	BH-2	Total Coliforms	Lab analysis	Annually	24	24	cfus/ 100ml	-		No
H-2Total Oxidised NitrogenLab analysisAnnually0.280.28mg/l-No/(09/2014BH-2Total SolidsLab analysisAnnually733733mg/l-No/(09/2014BH-2ZincLab analysisAnnually0.00420.0042mg/l-No/(09/2014BH-3AluminiumLab analysisAnnually0.00420.003mg/l0.15No/(09/2014BH-3AluminiumLab analysisAnnually<0.003	02/09/2014	BH-2	Total Organic Carbon	Lab analysis	Annually	<3	<3	mg/l	-		No
Holy 2014BH-2Total SolidsLab analysisAnnually733733mg/l-NoV09/2014BH-2ZincLab analysisAnnually0.00420.0042mg/l-NoV09/2014BH-3AluminiumLab analysisAnnually00000V09/2014BH-3AluminiumLab analysisAnnually<0.003	02/09/2014	BH-2	Total Oxidised Nitrogen	Lab analysis	Annually	0.28	0.28	mg/l	-		No
kl-2 Zinc Lab analysis Annually 0.0042 0.0042 mg/l - No kl09/2014 Image: Constraint of the state of the	02/09/2014	BH-2	Total Solids	Lab analysis	Annually	733	733	mg/l	-	Ī	No
y/09/2014Image: Section of the section of	02/09/2014	BH-2	Zinc	Lab analysis	Annually	0.0042	0.0042	mg/l	-		No
H-3AluminiumLab analysisAnnually<0.003<0.003mg/l0.15No109/2014BH-3Ammoniacal NitrogenLab analysisAnnually<0.02	02/09/2014					0	0		0		
k/09/2014 k/09/2014BH-3Ammoniacal NitrogenLab analysisAnnually<0.2<0.2mg/l0.18Nok/09/2014BH-3ArsenicLab analysisAnnually0.00030.0003mg/l0.008Nok/09/2014BH-3BariumLab analysisAnnually0.0290.029mg/l-Nok/09/2014BH-3BoronLab analysisAnnually0.0260.026mg/l0.004Nok/09/2014BH-3CadmiumLab analysisAnnually<0.001	02/09/2014	BH-3	Aluminium	Lab analysis	Annually	< 0.003	< 0.003	mg/l	0.15		No
H-3 Arsenic Lab analysis Annually 0.0003 0.0003 mg/l 0.008 No V/09/2014 BH-3 Barium Lab analysis Annually 0.029 0.029 mg/l - No V/09/2014 BH-3 Boron Lab analysis Annually 0.029 0.029 mg/l - No V/09/2014 BH-3 Boron Lab analysis Annually 0.026 0.026 mg/l 0.75 No V/09/2014 BH-3 Cadmium Lab analysis Annually <0.0001	02/09/2014	BH-3	Ammoniacal Nitrogen	Lab analysis	Annually	<0.2	<0.2	mg/l	0.18		No
kg/09/2014 BH-3 Barium Lab analysis Annually 0.029 0.029 mg/l - No v/09/2014 BH-3 Boron Lab analysis Annually 0.029 0.029 mg/l - No v/09/2014 BH-3 Boron Lab analysis Annually 0.026 0.026 mg/l 0.75 No v/09/2014 BH-3 Cadmium Lab analysis Annually <0.0001	02/09/2014	BH-3	Arsenic	Lab analysis	Annually	0.0003	0.0003	mg/l	0.008		No
kH-3 Boron Lab analysis Annually 0.026 0.026 mg/l 0.75 No k/09/2014 BH-3 Cadmium Lab analysis Annually <0.026	02/09/2014	BH-3	Barium	Lab analysis	Annually	0.029	0.029	mg/l	-		No
kH-3 Cadmium Lab analysis Annually <0.0001 <0.001 mg/l 0.004 No k2/09/2014 BH-3 Calcium Lab analysis Annually 97 97 mg/l - No k2/09/2014 BH-3 Calcium Lab analysis Annually 97 97 mg/l - No k2/09/2014 BH-3 Chloride Lab analysis Annually 17 17 mg/l - No k2/09/2014 BH-3 Chromium Lab analysis Annually 0.007 0.007 mg/l 0.038 No k2/09/2014 BH-3 Copper Lab analysis Annually 0.0017 0.0017 mg/l 1.5 No k2/09/2014 BH-3 Copper Lab analysis Annually 0.005 <0.05	02/09/2014	BH-3	Boron	Lab analysis	Annually	0.026	0.026	mg/l	0.75		No
k/09/2014 BH-3 Calcium Lab analysis Annually 97 97 mg/l - No k/09/2014 BH-3 Chloride Lab analysis Annually 97 97 mg/l - No k/09/2014 BH-3 Chloride Lab analysis Annually 17 17 mg/l - No k/09/2014 BH-3 Chromium Lab analysis Annually 0.007 0.007 mg/l 0.038 No k/09/2014 BH-3 Copper Lab analysis Annually 0.0017 0.0017 mg/l 1.5 No k/09/2014 BH-3 Cyanide Lab analysis Annually <0.05	02/09/2014	BH-3	Cadmium	, Lab analysis	Annually	<0.0001	< 0.0001	mg/l	0.004		No
kl/09/2014 BH-3 Chloride Lab analysis Annually 17 17 mg/l - No kl/09/2014 BH-3 Chromium Lab analysis Annually 0.007 0.007 mg/l 0.038 No kl/09/2014 BH-3 Copper Lab analysis Annually 0.0017 0.0017 mg/l 1.5 No kl/09/2014 BH-3 Cyanide Lab analysis Annually <0.05	02/09/2014	BH-3	Calcium	Lab analysis	Annually	97	97	mg/l	-	Ī	No
#//9/2014 BH-3 Chromium Lab analysis Annually 0.007 0.007 mg/l 0.038 No #//9/2014 BH-3 Copper Lab analysis Annually 0.0017 0.0017 mg/l 1.5 No #//9/2014 BH-3 Cyanide Lab analysis Annually <0.05	02/09/2014	BH-3	Chloride	Lab analysis	Annually	17	17	mg/l	-		No
Image: Work with the system Copper Lab analysis Annually 0.0017 0.0017 mg/l 1.5 No V09/2014 BH-3 Cyanide Lab analysis Annually <0.05	02/09/2014	BH-3	Chromium	Lab analysis	Annually	0.007	0.007	mg/l	0.038		No
2/09/2014 BH-3 Cyanide Lab analysis Annually <0.05 <0.05 mg/l 0.04 No	02/09/2014	BH-3	Copper	Lab analysis	Annually	0.0017	0.0017	mg/l	1.5		No
	02/09/2014	BH-3	Cyanide	Lab analysis	Annually	<0.05	< 0.05	mg/l	0.04		No

Groundwat	er/Soil mon	itoring templa	ite		Lic No:	W0048-01		Year	2014	
02/09/2014	BH-3	Electrical conductivity	On-site analysis	Annually	0.59	0.59	mS/cm	-		No
02/09/2014	BH-3	Faecal Coliforms	Lab analysis	Annually	0	0	cfus/ 100ml	-		No
02/09/2014	BH-3	Fluoride	Lab analysis	Annually	<0.5	<0.5	mg/l	-		No
02/09/2014	BH-3	Groundwater Level	On-site analysis	Annually	5.64	5.64	m bgl	-		No
02/09/2014	BH-3	Iron	Lab analysis	Annually	0.08	0.08	mg/l	-		No
02/09/2014	BH-3	Kjeldahl Nitrogen	Lab analysis	Annually	<1	<1	mg/l	-		No
02/09/2014	BH-3	Lead	Lab analysis	Annually	0.00007	0.00007	mg/l	0.019		No
02/09/2014	BH-3	Magnesium	Lab analysis	Annually	5.37	5 37	mg/l	-		No
02/09/2014	BH-3	Manganese	Lab analysis	Annually	0.173	0.173	mg/l	-		No
02/09/2014	BH-3	Mercury	Lab analysis	Annually	<0.00001	<0.00001	mg/l	0.0008		No
02/09/2014	BH-3	Mineral Oils	Lab analysis	Annually	0.07	0.07	mø/l	-		No
02/09/2014	BH-3	Nickel	Lab analysis	Annually	0.088	0.088	mg/l	0.015		No
02/09/2014	BH-3	Nitrate	Lab analysis	Annually	3.86	3,86	mø/l	37.5		No
02/09/2014	BH-3	Nitrite	Lab analysis	Annually	<0.05	<0.05	mg/l	-		No
02/09/2014	BH-3	Orthophosphat e	Lab analysis	Annually	<0.05	<0.05	mg/l	-		No
02/09/2014	BH-3	рН	Lab analysis	Annually	8.2	8.2	pH units	-		No
02/09/2014	BH-3	Phosphorous, Total	Lab analysis	Annually	0.632	0.632	mg	-		No
02/09/2014	BH-3	PAHs (16)	Lab analysis	Annually	0.0004	0.0004	mg/l	0.00008		No
02/09/2014	BH-3	Potassium	Lab analysis	Annually	1.43	1.43	mg/l	-		No
02/09/2014	BH-3	Selenium	Lab analysis	Annually	0.0013	0.0013	mg/l	-		No
02/09/2014	BH-3	Silver	Lab analysis	Annually	< 0.002	< 0.002	mg/l	-		No
02/09/2014	BH-3	Sodium	Lab analysis	Annually	11.1	11.1	mg/l	-		No
02/09/2014	BH-3	Sulphate	Lab analysis	Annually	49	49	mg/l	187.5		No
02/09/2014	BH-3	Total Alkalinity	Lab analysis	Annually	265	265	mg/l	-		No
02/09/2014	BH-3	Total Coliforms	Lab analysis	Annually	3	3	cfus/ 100ml	-		No
02/09/2014	BH-3	Total Organic Carbon	Lab analysis	Annually	3	3	mg/l	-		No
02/09/2014	BH-3	Total Oxidised Nitrogen	Lab analysis	Annually	0.88	0.88	mg/l	-		No
02/09/2014	BH-3	Total Solids	Lab analysis	Annually	878	878	mg/l	-		No
02/09/2014	BH-3	Zinc	Lab analysis	Annually	0.004	0.004	mg/l	-		No
)2/09/2014					0	0	···ˈˈˈə/ '	0		
02/09/2014	BH-7	Aluminium	Lab analysis	Annually	<0.003	< 0.003	mg/l	0.15		No
02/09/2014	BH-7	Ammoniacal Nitrogen	Lab analysis	Annually	<0.2	<0.2	mg/l	0.18		No
02/09/2014	BH-7	Arsenic	Lab analysis	Annually	0.0008	0.0008	mg/l	0.008		No
02/09/2014	BH-7	Barium	Lab analysis	Annually	0.045	0.045	mø/l	-		No
02/09/2014	BH-7	Boron	Lab analysis	Annually	0.057	0.057	mg/l	0.75		No
02/09/2014	BH-7	Cadmium	Lab analysis	Annually	<0.001	<0.0001	mø/l	0.004		No
02/09/2014	BH-7	Calcium	Lab analysis	Annually	158	158	mø/l	-		No
02/09/2014	BH-7	Chloride	Lab analysis	Annually	17.2	17.2	mg/l	-		No
02/09/2014	BH-7	Chromium	Lab analysis	Annually	0.023	0.023	mg/l	0.038		No
, -,,+		1	analy515		0.025	0.025	· '6' · ·	0.000		

Groundwat	er/Soil m	nonitoring templa	ite		Lic No:	W0048-01		Year	2014	
02/09/2014	BH-7	Copper	Lab analysis	Annually	0.003	0.003	mg/l	1.5		No
02/09/2014	BH-7	Cyanide	Lab analysis	Annually	< 0.05	<0.05	mg/l	0.04		No
02/09/2014	BH-7	Electrical	On-site analysis	Annually	0.89	0.89	mS/cm	-		No
		conductivity		,						
02/09/2014	BH-7	Faecal Coliforms	Lab analysis	Annually	0	0	cfus/ 100ml	-		No
			,	,			,			
02/09/2014	BH-7	Fluoride	Lab analysis	Annually	<0.5	<0.5	mg/l	-		No
02/09/2014	BH-7	Groundwater	On-site analysis	Annually	2.45	2.45	m bgl	-		No
		Level	,	,			0			
02/09/2014	BH-7	Iron	Lab analysis	Annually	<0.019	<0.019	mg/l	-		No
02/09/2014	BH-7	Kieldahl	Lab analysis	Annually	<1	<1	mg/l	-		No
		Nitrogen	,	,			0,			
02/09/2014	BH-7	Lead	Lab analysis	Annually	0.00003	0.00003	mg/l	0.019		No
02/09/2014	BH-7	Magnesium	Lab analysis	Annually	10.4	10.4	mg/l	-		No
02/09/2014	BH-7	Manganese	Lab analysis	Annually	0.0008	0.0008	mg/l	-		No
02/09/2014	BH-7	Mercurv	Lab analysis	Annually	<0.00001	< 0.00001	mg/l	0.0008		No
02/09/2014	BH-7	Mineral Oils	Lab analysis	Annually	0.04	0.04	mg/l	-		No
02/09/2014	BH-7	Nickel	Lab analysis	Annually	0.0044	0.0044	mg/l	0.015		No
02/09/2014	BH-7	Nitrate	Lab analysis	Annually	1.11	1.11	mg/l	37.5		No
02/09/2014	BH-7	Nitrite	Lab analysis	Annually	<0.05	< 0.05	mg/l	-		No
02/09/2014	BH-7	Orthophosphat	Lab analysis	Annually	<0.05	<0.05	mg/l	- 1		No
,, 2014	[e				.0.05				
2/09/2014	BH-7	pH	Lab analysis	Annually	83	8.3	pH units	-		No
02/09/2014	BH-7	Phosphorous	Lab analysis	Annually	0 444	0 444	mg	-		No
-, 33, 2014	5.1 /	Total	Las anarysis		0.777	0.111	ď			110
2/09/2014	BH-7	PAHs (16)	Lab analysis	Annually	< 0.0003	< 0.0003	mg/l	0.00008		No
)2/09/2014	BH-7	Potassium	Lab analysis	Annually	2.08	2.08	mø/l	-		No
2/09/2014	BH-7	Selenium	Lab analysis	Annually	0.0015	0.0015	mg/l	-		No
2/09/2014	BH-7	Silver	Lab analysis	Annually	<0.0015	<0.0015	mø/l	-		No
2/09/2014	BH-7	Sodium	Lab analysis	Annually	16.9	16.9	mø/l	-		No
2/09/2014	BH-7	Sulphate	Lab analysis	Annually	120	120	mg/l	187 5		No
02/09/2014	BH-7	Total Alkalinity	Lab analysis	Annually	390	390	mø/l	-		No
,, 2014	[. o ca. / inconnety			550	550				
02/09/2014	BH-7	Total Coliforms	Lab analysis	Annually	<1	<1	cfus/ 100ml	-		No
52,03,2014	5117		Lus anarysis	, and any	<u>``</u>	1	003/ 100111			110
12/09/2014	BH-7	Total Organic	l ah analysis	Annually	6.41	6.41	mg/l	-		No
5-,05,2014	5117	Carbon	Las anarysis		0.71	0.71				
02/09/2014	BH-7	Total Oxidised	Lab analysis	Annually	0.26	0.26	mø/l	-		No
02,03,2014	5117	Nitrogen	Lus anarysis	, and any	0.20	0.20				110
		Nici Ogen			1					
12/00/2014	₽ Н _7	Total Solida	Lab analysis	Annually	1640	1640	ma/l			No
12/03/2014	BH-7	Zinc	Lau analysis	Annually	0.006	0.006	mg/l			No
12/03/2014	י-רוט	21110	Lan dildiysis	Annualiy	0.000	0.000	1118/1	-		INU
12/09/2014	RH_8	Aluminium	Lab analysis	Annually	0	0	mg/l	0.15		No
02/03/2014		Ammoniacal	Lab analysis	Annually	0	0	mg/l	0.15		No
02/09/2014	0-10	Nitrogan	Lan allalysis	Annualiy	U	U	1118/1	0.10		INU
02/00/2014	DLL 0	Arcopio	Lab analysis	Annually	0	0		0.008		No
02/09/2014	DI 0	Arsenic		Annually	0	0	mg/l	0.008		NO
02/09/2014	01-0	Baran	Lau diidiysis	Annually	0	0	ma/l	- 0.75		No
02/09/2014	рн о	Boron	Lab analysis	Annually	0	U	rng/I	0.75		INO
02/09/2014	вн-8	Cadmium	Lab analysis	Annually	0	U	mg/i	0.004		NO N-
JZ/09/2014	вн-я	Calcium	Lab analysis	Annually	U	U	mg/i	-		NO

Groundwat	ter/Soil m	onitoring templa	ate		Lic No:	W0048-01		Year	2014	
02/09/2014	BH-8	Chloride	Lab analysis	Annually	0	0	mg/l	-		No
02/09/2014	BH-8	Chromium	Lab analysis	Annually	0	0	mg/l	0.038		No
02/09/2014	BH-8	Copper	Lab analysis	Annually	0	0	mg/l	1.5		No
02/09/2014	BH-8	Cyanide	Lab analysis	Annually	0	0	mg/l	0.04		No
02/09/2014	BH-8	Electrical	On-site analysis	Annually	0	0	mS/cm	-		No
		conductivity								
02/09/2014	BH-8	Faecal Coliforms	Lab analysis	Annually	0	0	cfus/ 100ml	-		No
02/09/2014	BH-8	Fluoride	Lab analysis	Annually	0	0	mg/l			No
02/09/2014	BH-8	Groundwater Level	On-site analysis	Annually	0	0	m bgl	-		No
02/09/2014	BH-8	Iron	Lab analysis	Annually	0	0	mg/l	-		No
02/09/2014	BH-8	Kjeldahl	Lab analysis	Annually	0	0	mg/l	-		No
		Nitrogen								
02/09/2014	BH-8	Lead	Lab analysis	Annually	0	0	mg/l	0.019		No
02/09/2014	BH-8	Magnesium	Lab analysis	Annually	0	0	mg/l	-		No
02/09/2014	BH-8	Manganese	Lab analysis	Annually	0	0	mg/l	-		No
02/09/2014	BH-8	Mercury	Lab analysis	Annually	0	0	mg/l	0.0008		No
02/09/2014	BH-8	Mineral Oils	Lab analysis	Annually	0	0	mg/l	-		No
02/09/2014	BH-8	Nickel	Lab analysis	Annually	0	0	mg/l	0.015		No
02/09/2014	BH-8	Nitrate	Lab analysis	Annually	0	0	mg/l	37.5		No
02/09/2014	BH-8	Nitrite	Lab analysis	Annually	0	0	mg/l	-		No
02/09/2014	BH-8	Orthophosphat	Lab analysis	Annually	0	0	mg/l	-		No
		e								
02/09/2014	BH-8	рН	Lab analysis	Annually	0	0	pH units	-		No
02/09/2014	BH-8	Phosphorous, Total	Lab analysis	Annually	0	0	mg	-		No
02/09/2014	BH-8	PAHs (16)	Lab analysis	Annually	0	0	mg/l	0.00008		No
02/09/2014	BH-8	Potassium	Lab analysis	Annually	0	0	mg/l	-		No
02/09/2014	BH-8	Selenium	, Lab analysis	Annually	0	0	mg/l	-		No
02/09/2014	BH-8	Silver	, Lab analysis	Annually	0	0	mg/l	-		No
02/09/2014	BH-8	Sodium	Lab analysis	, Annually	0	0	mg/l	-		No
02/09/2014	BH-8	Sulphate	, Lab analysis	Annually	0	0	mg/l	187.5		No
02/09/2014	BH-8	Total Alkalinity	Lab analysis	Annually	0	0	mg/l	-		No
02/09/2014	BH-8	Total Coliforms	Lab analysis	Annually	0	0	cfus/ 100ml	-		No
			,							
02/09/2014	BH-8	Total Organic	Lab analysis	Annually	0	0	mg/l	-		No
		Carbon					-			
02/09/2014	BH-8	Total Oxidised	Lab analysis	Annually	0	0	mg/l	-		No
		Nitrogen					-			
02/09/2014	BH-8	Total Solids	Lab analysis	Annually	0	0	mg/l	-		No
02/09/2014	BH-8	Zinc	Lab analysis	Annually	0	0	mg/l	-		No
02/09/2014					0	0		0		
02/09/2014	PW-2	Aluminium	Lab analysis	Annually	< 0.003	< 0.003	mg/l	0.15		No
02/09/2014	PW-2	Ammoniacal	Lab analysis	Annually	<0.2	<0.2	mg/l	0.18		No
		Nitrogen								
02/09/2014	PW-2	Arsenic	Lab analysis	Annually	< 0.0001	< 0.0001	mg/l	0.008		No
-		Barium	Lah analysis	Annually	0.02	0.02	mg/l	-		No
02/09/2014	PVV-Z	Dariain	Lab anarysis	Annuany	0.02	0.02	IIIg/1			110

Groundwat	er/Soil m	onitoring templa	ate		Lic No:	W0048-01		Year	2014	
02/09/2014	PW-2	Cadmium	Lab analysis	Annually	< 0.0001	< 0.0001	mg/l	0.004		No
02/09/2014	PW-2	Calcium	Lab analysis	Annually	83.6	83.6	mg/l	-		No
02/09/2014	PW-2	Chloride	Lab analysis	Annually	15.8	15.8	mg/l	-		No
02/09/2014	PW-2	Chromium	Lab analysis	Annually	< 0.003	< 0.003	mg/l	0.038		No
02/09/2014	PW-2	Copper	Lab analysis	Annually	0.02	0.02	mg/l	1.5		No
02/09/2014	PW-2	Cyanide	Lab analysis	Annually	<0.05	<0.05	mg/l	0.04		No
02/09/2014	PW-2	Electrical	On-site analysis	Annually	0.49	0.49	mS/cm	-		No
		conductivity	-							
02/09/2014	PW-2	Faecal Coliforms	Lab analysis	Annually	0	0	cfus/ 100ml	-		No
02/09/2014	PW-2	Fluoride	Lab analysis	Annually	<0.5	<0.5	mg/l	-		No
02/09/2014	PW-2	Groundwater	On-site analysis	Annually	0	0	m bgl	-		No
02/00/2014	D\A/_2	Iron	Lab analysis	Annually	<0.010	<0.019	mg/l	_		No
02/09/2014	PW-2	Kieldahl	Lab analysis	Annually	<0.013	<0.013	mg/l			No
02/03/2014	1 00 2	Nitrogen		Annuany	~0.1	NO.1				No
02/09/2014	PW-2	Lead	Lab analysis	Annually	0.0005	0.0005	mg/l	0.019		No
02/09/2014	PW-2	Magnesium	Lab analysis	Annually	4.08	4.08	mg/l	-		No
02/09/2014	PW-2	Manganese	Lab analysis	Annually	0.00006	0.00006	mg/l	-		No
02/09/2014	PW-2	Mercury	Lab analysis	Annually	<0.00001	<0.00001	mg/l	0.0008		No
02/09/2014	PW-2	Mineral Oils	Lab analysis	Annually	0.05	0.05	mg/l	-		No
02/09/2014	PW-2	Nickel	Lab analysis	Annually	0.0014	0.0014	mg/l	0.015		No
02/09/2014	PW-2	Nitrate	Lab analysis	Annually	7.92	7.92	mg/l	37.5		No
02/09/2014	PW-2	Nitrite	Lab analysis	Annually	<0.05	<0.05	mg/l	-		No
02/09/2014	PW-2	Orthophosphat e	Lab analysis	Annually	<0.05	<0.05	mg/l	-		No
02/09/2014	PW-2	pН	Lab analysis	Annually	7.1	7.1	pH units	-		No
02/09/2014	PW-2	Phosphorous, Total	Lab analysis	Annually	<0.02	<0.02	mg	-		No
02/09/2014	PW-2	PAHs (16)	Lab analysis	Annually	<0.0003	< 0.0003	mg/l	0.0008		No
02/09/2014	PW-2	Potassium	Lab analysis	Annually	2.25	2.25	mg/l	-		No
02/09/2014	PW-2	Selenium	Lab analysis	Annually	0.0005	0.0005	mg/l	-		No
02/09/2014	PW-2	Silver	Lab analysis	Annually	<0.002	<0.002	mg/l	-		No
02/09/2014	PW-2	Sodium	Lab analysis	Annually	9.25	9.25	mø/l	-		No
02/09/2014	PW-2	Sulphate	Lab analysis	Annually	18.1	18.1	mg/l	187.5		No
02/09/2014	PW-2	Total Alkalinity	Lab analysis	Annually	230	230	mg/l	-		No
02/09/2014	PW-2	Total Coliforms	Lab analysis	Annually	<1	<1	cfus/ 100ml	-		No
02/09/2014	PW-2	Total Organic	Lab analysis	Annually	<3	<3	mg/l	-		No
02/09/2014	PW-2	Total Oxidised	Lab analysis	Annually	1.79	1.79	mg/l	-		No
		Nitrogen								
02/09/2014	PW-2	Total Solids	Lab analysis	Annually	311	311	mg/l	-		No
02/09/2014	PW-2	Zinc	Lab analysis	Annually	0.021	0.021	mg/l	-		No
02/09/2014					0	0		0		
02/09/2014	PW-3	Aluminium	Lab analysis	Annually	< 0.003	< 0.003	mg/l	0.15		No
02/09/2014	PW-3	Ammoniacal Nitrogen	Lab analysis	Annually	<0.2	<0.2	mg/l	0.18		No
02/09/2014	PW-3	Arsenic	Lab analysis	Annually	<0.0001	<0.0001	mø/l	0.008		No
/ 00/ -014					.0.0001	.0.0001		0.000		

Groundwat	er/Soil mo	onitoring templa	ite		Lic No:	W0048-01		Year	2014	
02/09/2014	PW-3	Barium	Lab analysis	Annually	0.0011	0.0011	mg/l	-		No
02/09/2014	PW-3	Boron	Lab analysis	Annually	0.019	0.019	mg/l	0.75		No
02/09/2014	PW-3	Cadmium	Lab analysis	Annually	< 0.0001	< 0.0001	mg/l	0.004		No
02/09/2014	PW-3	Calcium	Lab analysis	Annually	36	36	mg/l	-		No
02/09/2014	PW-3	Chloride	Lab analysis	Annually	15.9	15.9	mg/l	-		No
02/09/2014	PW-3	Chromium	Lab analysis	Annually	< 0.003	< 0.003	mg/l	0.038		No
02/09/2014	PW-3	Copper	Lab analysis	Annually	0.009	0.009	mg/l	1.5		No
02/09/2014	PW-3	Cyanide	Lab analysis	Annually	<0.05	<0.05	mg/l	0.04		No
02/09/2014	PW-3	Electrical	On-site analysis	Annually	0.37	0.37	mS/cm	-		No
		conductivity	,	,						
02/09/2014	PW-3	Faecal Coliforms	Lab analysis	Annually	0	0	cfus/ 100ml	-		No
02/09/2014	PW-3	Eluoride	Lah analysis	Annually	<0.5	<0.5	mg/l	-		No
02/09/2014	PW-3	Iron	Lab analysis	Annually	<0.019	<0.019	mø/l	-		No
02/09/2014	PW-3	Kieldahl	Lab analysis	Annually	<1	<1	mg/l	-		No
52/05/2014		Nitrogen	Las analysis		·-					
02/09/2014	PW/-3	Lead	Lah analysis	Annually	0.0001	0.0001	mg/l	0.019		No
02/09/2014	PW/-3	Magnesium	Lab analysis	Annually	13.3	13.3	mg/l	0.019		No
02/09/2014	DW/-3	Magnesium	Lab analysis	Annually	0.0005	0.0005	mg/l	_		No
02/09/2014	PW-3	Morcury	Lab analysis	Annually	<0.0003	<0.0003	mg/l	0.0008		No
02/09/2014	P VV-5	Mineral Oils	Lab analysis	Annually	0.052	0.052	mg/l	0.0008		No
02/09/2014	P VV-5	Nickol	Lab analysis	Annually	0.032	0.032	mg/l	- 0.015		No
02/09/2014	PVV-3	Nickel	Lab analysis	Annually	0.0006	0.0006	mg/l	0.015		NO
02/09/2014	PVV-3	Nitrate	Lab analysis	Annually	5.00	3.00	mg/l	37.5		NO
02/09/2014	PVV-3	Orthophosphat	Lab analysis	Annually	<0.05	<0.05	mg/l	-		NO
02/09/2014	PW-5	Orthophosphat	Lab analysis	Annually	<0.05	<0.05	ing/i	-		NO
02/00/2014		e	Lab analusia	A	7 7		all calts			Na
02/09/2014	PW-3	pH Dhaanhaan	Lab analysis	Annually	7.7	7.7	pH units	-		NO
02/09/2014	PW-3	Total	Lad analysis	Annually	0.04	0.04	mg	-		NO
02/09/2014	PW-3	PAHs (16)	Lab analysis	Annually	<0.0003	<0.0003	mg/l	0.00008		No
02/09/2014	PW-3	Potassium	Lab analysis	Annually	<1.0	<1.0	mg/l	-		No
02/09/2014	PW-3	Selenium	Lab analysis	Annually	<0.0004	<0.0004	mg/l	-		No
02/09/2014	PW-3	Silver	Lab analysis	Annually	<0.0015	<0.0015	mg/l	-		No
02/09/2014	PW-3	Sodium	Lab analysis	Annually	12.4	12.4	mg/l	-		No
02/09/2014	PW-3	Sulphate	Lab analysis	Annually	12.4	12.4	mg/l	187.5		No
02/09/2014	PW-3	Total Alkalinity	Lab analysis	Annually	160	160	mg/l	-		No
02/09/2014	PW-3	Total Coliforms	Lab analysis	Annually	14	14	cfus/ 100ml	-		No
02/09/2014	PW-3	Total Organic	Lab analysis	Annually	<3	<3	mg/l	-		No
	ļ	Carbon								
02/09/2014	PW-3	Total Oxidised Nitrogen	Lab analysis	Annually	0.8	0.8	mg/l	-		No
02/00/2014	DW/ 2	Total Calida	Lab applysis	Annually	221	221				No
02/09/2014	PW-3		Lab analysis	Annually	221	221	rng/I			INO No
02/09/2014	r VV-3		Lad analysis	Annually	0.012	0.012	rng/I	-		INO
	1					+		-		

Groundwater/Soil monitoring template	Lic No:	W0048-01	Year	2014	
*please note exceedance of generic assessment criteria (GAC) such as a Groundw in results for a substance indicates that further interpretation of monitoring res Groundwater Monitoring Guideline Template Report at the link provided and subr El	ater Threshold Value (GTV) (ults is required. In addition t nit separately through ALDE PA.	or an Interim Guideline Value (IG to completing the above table, pl R as a licensee return or as other	V) or an upward trend ease complete the <u>Groundwa</u> wise instructed by the	iter monitoring template	
More information on the use of soil and groundwater standards/ generic assessmer (GAC) and risk assessment tools is available in the EPA published guidance (see the G31)	nt criteria link in <u>Guidance</u>	on the Management of Conta	minated Land and Groundwater at EPA	Licensed Sites (EPA 2013).	
**Depending on location of the site and proximity to other sensitive receptors alte GTV e.g. if the site is close to surface water compare to Surface Water Environment results to the Drinking	ernative Receptor based Wat al Quality Standards (SWEQS Water Standards (DWS)	ter Quality standards should be u S), If the site is close to a drinking	sed in addition to the Gro water supply compare Surface re water EQS	undwater Drinking water gulations (private supply) <u>GTV's standards</u>	Drinking water (public supply) standards

Ground	water/	'Soi	l moni	itori	ing	temp	late
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Table 3: Soil results

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

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

Lic No:

Environmental Liabilities template	Lic No:	W0048-01	Year	2014
 Click here to access EPA guidance on Environmental Liabilities and Financial				
provision				

			Commentary
1	ELRA initial agreement status	Required but not submitted	
2	ELRA review status	SELECT	
3	Amount of Financial Provision cover required as determined by the latest ELRA	Specify	
4	Financial Provision for ELRA status	SELECT	
5	Financial Provision for ELRA - amount of cover	Specify	
6	Financial Provision for ELRA - type	SELECT	
7	Financial provision for ELRA expiry date	Enter expiry date	
8	Closure plan initial agreement status	SELECT	
9	Closure plan review status	SELECT	
10	Financial Provision for Closure status	SELECT	
11	Financial Provision for Closure - amount of cover	Specify	
12	Financial Provision for Closure - type	SELECT	
13	Financial provision for Closure expiry date	Enter expiry date	

	Environmental Management Programme/Continuous Improvement Programme	template	Lic No:	W0048-01	Year	2014
	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	No				
3	Does the EMS maintain an Environmental Management Programme (EMP) as required in accordance with the licence requirements	Yes				
4	Do you maintain an environmental documentation/communication system to inform the public on environmental performance of the facility, as required by the licence	Yes			1	

Environmental Management Programme	(EMP) report				
Objective Category	Target	Status (% completed)	How target was progressed	Responsibility	Intermediate outcomes
Waste reduction/Raw material usage	Maximise recovery of	100		Individual	Improved Environmental
efficiency	incoming wastes				Management Practices
Groundwater protection	Ongoing monitoring and	100		Individual	Improved Environmental
	measurement - water				Management Practices
Noise reduction	Ongoing monitoring and	100		Individual	Improved Environmental
	measurement - noise				Management Practices
Reduction of emissions to Air	Ongoing monitoring and	100		Individual	Improved Environmental
	measurement - dust and				Management Practices
	landfill gas				

Noise monitoring summary report	Lic No:	W0048-01	Year
1 Was noise monitoring a licence requirement for the AER period?		Yes	
If yes please fill in table N1 noise summary below			-
	Noise		
2 Was noise monitoring carried out using the EPA Guidance note, including completion of the "Checkl	st <u>Guidance</u>	Yes	
for noise measurement report" included in the guidance note as table 6?	note NG4		
3 Does your site have a noise reduction plan		No	
4 When was the noise reduction plan last updated?		Enter date	
Have there been changes relevant to site noise emissions (e.g. plant or operational changes) since	the last noise	No	
survey?		INU	

Table N1. Nois	se monitoring sum	innary									
Date of monitoring	Time period	Noise location (on site)	Noise sensitive location -NSL (if applicable)	LA _{eq}	LA ₉₀	LA ₁₀	LA _{max}	Tonal or Impulsive noise* (Y/N)	If tonal /impulsive noise was identified was 5dB penalty applied?	Comments (ex. main noise sources on site, & extraneous noise ex. road traffic)	ls <u>site</u> compliant with noise limits (day/evening/night)?
02/09/2014	10:23 - 10:53		NSL1	44	43	45		Yes	Yes		Yes
02/09/2014	12:08 - 12:38		NSL1	48	43	49		No	Yes		Yes
02/09/2014	15:00 - 15:30		NSL1	48	42	49		No	Yes		Yes
02/09/2014	09:46 - 10:16		NSL2	48	45	48		No	Yes	The dominant noise source in the	Yes
02/09/2014	11:33 – 12:03		NSL2	48	46	50		No	Yes	vicinity of NSL3 is traffic on the N11	Yes
02/09/2014	14:22 - 14:52		NSL2	51	47	51		No	Yes	dual-carriageway, which runs east	Yes
02/09/2014	09:12 - 09:42		NSL3	64	61	65		Yes	Yes	of the Marrakesh site.	Yes
02/09/2014	10:59 - 11:29		NSL3	62	58	64		No	Yes		Yes
02/09/2014	12:44 – 13:14		NSL3	62	59	64		No	Yes		Yes

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

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

SELECT

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

Any additional comments? (less than 200 words)

Resource Usage/Energy efficiency summary	Lic No:	W0048-01	Year	2014

			Additional information
1	When did the site carry out the most recent energy efficiency audit? Please list the recommendations in table 3 below	No audit completed other than ongoing monitoring of usage by licensee.	Cells D10 and E10 based on SEAI: 10.169kWh/litre of diesel
	SEAL - 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 usag	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)	344	443.50	28.93%	
Total Energy Generated (MWHrs)				
Total Renewable Energy Generated (M	/WHrs)			
Electricity Consumption (MWHrs)	5.058	2.85	-43.65%	
Fossil Fuels Consumption:				
Heavy Fuel Oil (m3)	33.33	43.333	30.01%	
Light Fuel Oil (m3)				
Natural gas (m3)				
Coal/Solid fuel (metric tonnes)				
Peat (metric tonnes)				
Renewable Biomass				
Renewable energy generated on site				

Г

* 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 usag				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							
Recycled water							
Total							

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

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

Resource Usage/Energy efficiency summary

Lic No: W0048-01

Year

Table R3 Waste Stream					
	Landfill	Incineration	Recycled	Other	
Hazardous (Tonnes)					
Non-Hazardous (Tonnes)	44.68	8.88		35.8	

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

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

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

2014

Complaints and Incidents summary template		Lic No:	W0048-01	Year	2014
 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				

1 Complaints summary						
		Brief description of complaint (Free txt <20	Corrective action< 20			Further
Category	Other type (please specify)	words)	words	Resolution status	Resolution date	information
SELECT				SELECT		
SELECT				SELECT		
SELECT				SELECT		
SELECT				SELECT		
SELECT				SELECT		
	1 Complaints summary Category SELECT SELECT SELECT SELECT SELECT	Complaints summary Category Other type (please specify) SELECT SELECT SELECT SELECT SELECT SELECT SELECT	1 Complaints summary Brief description of complaint (Free txt <20 Category Other type (please specify) words) SELECT SELECT SELECT SELECT SELECT SELECT SELECT	1 Complaints summary Brief description of complaint (Free txt <20	1 Complaints summary Defined description of complaint (Free txt <20	1 Complaints summary Brief description of complaint (Free txt <20 words)

	Additional information
Yes	
	Yes

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

Table 2 Incidents sur	nmary													
						Other	Activity in				Preventative			
			Incident category*please			cause(please	progress at time			Corrective action<20	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
05/11/2014	Trigger level reached	Other location (please specif	1. Minor	No Uncontrolled release	Other (add details)	Normal activities	EPA	New	None deemed necessa	None deemed	Complete	05/11/2014	Medium
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
Total number of														
incidents current														
year	1													
Total number of														
incidents previous														
year	C													
% reduction/														
increase	#DIV/0!													

WASTE SUMMARY	Lic No:	W0048-01	Year	2014	
SECTION A-PRTR ON SITE WASTE TREATMENT AND WASTE TRANSFERS TAB- TO BE COMPLET	FED BY ALL IPPC AND WASTE FACILITIES	PRTR facility logon	dropdown list c ⁱ	lick to see options	

		Additional Information
		C&D materials (Soil &
		Stones, Concrete,
		Bituminous Mixtures, Mixed
		C&D Waste) are accepted at
		the facility for screening,
		segregation, sorting and
		grading and sold as product
		for re-use purposes. During
		2014, no material was
		landfilled at the facility. Any
		materials which were not
		sold from the facility are
/ere any wastes accepted onto your site for recovery or disposal or treatment prior to recovery or disposal within the boundaries of your facility ?; (waste generated within your		temporarily stored on site
oundaries is to be captured through PRTR reporting)	Yes	pending sale.

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

SELECT	
SELECT	

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

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

Licenced annual tonnage limit for your site (total tonnes/annum)	EWC code	Source of waste accepted	Description of waste accepted Please enter an accurate and detailed description - which applies to relevant EWC code <u>European Waste</u> <u>Catalogue EWC codes</u>	Quantity of waste accepted in current reporting year (tonnes)	Quantity of waste accepted in previous reporting year (tonnes)	Reduction/ Increase over previous year +/ - %	Reason for reduction/ increase from previous reporting year	Packaging Content (%)- only applies if the waste has a packaging component	Disposal/Recovery or treatment operation carried out at your site and the description of this operation	Quantity of waste remaining on site at the end of reporting year (tonnes)	Comments -
									R5-Recycling/reclamation or		
									other inorganic materials		Qty remaining
		17- CONSTRUCTION AND							which includes soil celaning		on site is the
		DEMOLITION WASTES							resuling in recovery of the soil		difference of
		(INCLUDING EXCAVATED SOIL							and recycling of inorganic		material IN vs.
10000	17 01 01	FROM CONTAMINATED SITES)	concrete	45,724	18,941.00	141%	Market demand	0%	construction materials	22,750	OUT for 2014
									05 D		
									RS-Recycling/reclamation or		Otu nama inin a
									which includes soil colonias		Qly remaining
		DEMOLITION WASTES							resuling in recovery of the soil		difference of
		(INCLUDING EXCAVATED SOIL							and recycling of inorganic		material IN vs
10000	17.05.04	FROM CONTAMINATED SITES	soil & stones	12,698	16.801.00	-24%	Market demand	0%	construction materials	2.205	OUT for 2014
1000									R5-Recycling/reclamation or other inorganic materials		Qty remaining
		17- CONSTRUCTION AND							which includes soil celaning		on site is the
1		DEMOLITION WASTES							resuling in recovery of the soil		difference of
1		(INCLUDING EXCAVATED SOIL							and recycling of inorganic		material IN vs.
100000	17 03 02	FROM CONTAMINATED SITES)	Bituminous Mixtures	3,322	3,548.00	-6%	Market demand	0%	construction materials	1,201	OUT for 2014
		17- CONSTRUCTION AND			-						Qty remaining
10000	1/0904	DEMOLITION WASTES	Mixed C&D waste	2,186	0	#DIV/0!	Market demand	1		2,186	on site is the

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

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

5 Is all waste storage infrastructure as required by your licence and approved by the Agency in place? If no please list waste storage infrastructure required on site

SELECT SELECT

WASTE SUMMARY	Lic No:	W0048-01	Year	2014	
6 Does your facility have relevant nuisance controls in place?		SELECT			
7 Do you have an odour management system in place for your facility? If no why?		SELECT			
8 Do you maintain a sludge register on site?		SELECT			

SECTION D-TO BE COMPLETED BY LANDFILL SITES ONLY Table 2 Waste type and tonnage-landfill only

 Table 2 waste type	and tonnage-ianumi 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
C&D	100,000	0		

Table 3 General information-Landfill only

Area ID	Date landfilling commenced	Date landfilling commenced Date landfilling ceased Current	Currently landfilling	ffilling Private or Public Operated	Inert or non-hazardous	Predicted date to cease landfilling	te to Licence permits asbestos	Is there a separate cell for asbestos?	Accepted asbestos in reporting year	Total disposal area occupied by waste	Lined disposal area occupied by waste	Unlined area	Comments on liner type
										SELECT UNIT	SELECT UNIT	SELECT UNIT	
Entire LF	2000	N/A	No	Private	Inert		No						Not lined

No SELECT

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

Was meterological monitoring in						Was topography			
compliance with Landfill		Was Landfill Gas monitored in	Was SW monitored in			of the site	Has the statement under		
Directive (LD) standard	Was leachate monitored in compliance	compliance with LD standard in	compliance with LD	Have GW trigger levels	Were emission limit values agreed with	surveyed in	S53(A)(5) of WMA been		
in reporting year +	with LD standard in reporting year	reporting year	standard in reporting year	been established	the Agency (ELVs)	reporting year	submitted in reporting year	Comments	
Yes	N/A	Yes	Yes	No	No	No	No	No change in levels since	previous topo survey
I plaase refer to Landfil	Manual linked above for relevant Landfill	Directive monitoring standards							

.+ please refer to Landfill Manual linked above for relevant Landfill Directive monitoring standards Table 5 Capping-Landfill only

Table 5 capping-ta	Seapping-tandini only										
Area uncapped*	Area with temporary can			Area with waste that							
SELECT UNIT	SELECT UNIT	Area with final cap to LD Standard m2 ha, a	Area capped other	capped to date under licence	What materials are used in the cap	Comments					

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

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

Table 7 Landfill Gas-Landfill only

Gas Captured&Treated by LFG System m3	Power generated (MW / KWh)	Used on-site or to national grid	Was surface emissions monitoring performed during the reporting year?	Comments
Not applicable			SELECT	



| PRTR# : W0048 | Facility Name : Kilmurry South | Filename : W0048_PRTR 2014.xls | Return Year : 2014 |

Version 1.1.18

Guidance to completing the PRTR workbook

AER Returns Workbook

REFERENCE YEAR 2014

1. FACILITY IDENTIFICATION

Parent Company Name	Marrakesh Limited
Facility Name	Kilmurry South
PRTR Identification Number	W0048
Licence Number	W0048-01

Classes of Activity

No. class_name - Refer to PRTR class activities below

Address 1	Bray
Address 2	
Address 3	
Address 4	
	Wicklow
Country	Ireland
Coordinates of Location	-6.13329 53.1506
River Basin District	IEEA
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	Louise O'Donnell
AER Returns Contact Email Address	louise.odonnell@pateltonra.com
AER Returns Contact Position	Environmental Consultant
AER Returns Contact Telephone Number	018020520
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	018020525
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	5
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name					
5(d)	Landfills					
5(c)	Installations for the disposal of non-hazardous waste					
50.1	General					
3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)						
Is it applicable?	No					
Have you been granted an exemption ?						
If applicable which activity class applies (as per						
Schedule 2 of the regulations) ?						
Is the reduction scheme compliance route being						
used ?						

4. WASTE IMPORTED/ACCEPTED ONTO SITE	Guidance on waste imported/accepted onto site
Do you import/accept waste onto your site for on-	
site treatment (either recovery or disposal	
activities) ?	Yes

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

4.1 RELEASES TO AIR

Link to previous years emissions data

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

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

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

SECTION B : REMAINING PRTR POLLUTANTS

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

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

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

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

Additional Data Requested from Landfill operators										
or the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide Immary data on landfill gas (Methane) flared or utilised on their facilities to accompany the figures for total ethane generated. Operators should only report their Net methane (CH4) emission to the environment under total) KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:										
Landfill:	Kilmurry South				-					
Please enter summary data on the										
quantities of methane flared and / or utilised			Meth	od Used						
				Designation or	Facility Total Capacity m3					
	T (Total) kg/Year	M/C/E	Method Code	Description	per hour					
Total estimated methane generation (as per										
site model)	0.0				N/A					
Methane flared	0.0				0.0	(Total Flaring Capacity)				
Methane utilised in engine/s	0.0				0.0	(Total Utilising Capacity)				
Net methane emission (as reported in Section										
A above)	0.0				N/A					

4.2 RELEASES TO WATERS

Link to previous years emissions data

| PRTR# : W0048 | Facility Name : Kilmurry South | Filename : W0048_PRTR 2014.xls | Return Year : 2014 |

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

SECTION A : SECTOR SPECIFIC PRTR POLI	Data on am	bient monitoring of	storm/surface water or groundwa	ter, conducted as part of your lice	nce requirements, should N	OT be submitted under AER / I	PRTR Reporting as this on	
	Please enter all quantities	in this section in KGs						
POLLUTANT			QUANTITY					
				Method Used				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

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

SECTION B : REMAINING PRTR POLLUTANTS

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

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

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

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT			QUAN					
				Method Used				
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0) 00	0.0

4.3 RELEASES TO WASTEWATER OR SEWER

Link to previous years emissions data

| PRTR# : W0048 | Facility Name : Kilmurry South | Filename : W0048_PRTR 2014.xls | Return Yea 30/03/2015 09:19

SECTION A : PRTR POLLUTANTS

OFFSITE TRAN	SFER OF POLLUTANTS DESTINED FOR WASTE-W	ATER TRE	ATMENT OR SEWER		Please enter all quantities in this section in KGs			
POLLUTANT			METH	OD	QUANTITY			
		Method Used						
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0) 00	0.0

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

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

OFFSITE TRAN	SFER OF POLLUTANTS DESTINED FOR WASTE-W	Please enter all quantities in this section in KGs							
POLLUTANT			METHO	D	QUANTITY				
			Met	hod Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	
					0.0	0	0.0	0.0	

4.4 RELEASES TO LAND

Link to previous years emissions data

| PRTR# : W0048 | Facility Name : Kilmurry South | Filename : W0048_PRTR 2014.xls | Return Year : 2014 |

30/03/2015 09:19

SECTION A : PRTR POLLUTANTS

	Please enter all quantities	;						
POLLUTANT			METHO	D		QUANTITY		
			Meth	od Used				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/	Year
					0.0		0.0	0.0

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

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

	RELEASES TO LAND	Please enter all quantities in this section in KGs					
POLLUTANT			METHO	D			QUANTITY
			Met	hod Used			
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0.0	0	0 00

	5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE PRT# : W0048 Facility Name : Kilmurry South Filename : W0048_PRTR 2014.x/s Return Year : 2014.												
i.				Please enter	all quantities on this sheet in Tonnes		_						3
				Quantity (Tonnes per Year)				Method Used		Haz Waste : Name and Licence/Permit No of Next Destination Facility <u>Nor</u> <u>Haz Waste</u> : Name and Licence/Permit No of Recover/Disposer	<u>Haz Waste</u> : 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)
						Waste							
	Tana dan Dantin stian	European waste			Description of Wests	Treatment		Martha al Llanad	Location of				
	I ransfer Destination	Code	Hazardous		Description of Waste	Operation	M/C/E	Method Used	Treatment	Variaus off site rause in			
										various on-site reuse in			
	Within the Country	17 01 01	No	22974 0	concrete	R5	м	Weighed	Offsite in Ireland	activities Not Applicable	Ireland		
	What are boundy	11 01 01	110	22014.0		110		Weighed	onsite in relatio	Various off-site reuse in	.,.,.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
					bituminous mixtures containing other than					construction-related			
	Within the Country	17 03 02	No	2121.0	those mentioned in 17 03 01	R5	М	Weighed	Offsite in Ireland	activities,Not applicable	Ireland		
										Various off-site reuse in			
					soil and stones other than those mentioned					construction-related			
	Within the Country	17 05 04	No	10493.0	in 17 05 03	R5	М	Weighed	Offsite in Ireland	activities,Not applicable	.,.,,,Ireland		
											Bollarney,The		
										Multimetals,WFP-WW-09-	Murrough,Wicklow		
	Within the Country	19 12 02	No	86.1	ferrous metal	R4	М	Weighed	Offsite in Ireland	0014-01	Town,0,ireland		
											Fassaroe,Bray,Co		
	Within the Country	20 03 01	No	68.4	mixed municipal waste	D15	М	Weighed	Offsite in Ireland	Greenstar,W0053-03	Wicklow,.,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