Facility Information Summary	
AER Reporting Year	2017
Licence Register Number	W0048-01
Name of site	Marrakesh Ltd.
Site Location	murry South Landfill, Kilmurry South, Kilmacanogue, Bray, C. Wicklo
NACE Code	3821
Class/Classes of Activity	D1, D15, R3, R5, R13
National Grid Reference (6E, 6 N)	53.1506, -6.13329

A description of the activities/processes at the site for the reporting year. This should include information such as production increases or decreases on site, any infrastructural changes, environmental performance which was measured during the reporting year **and an overview of compliance with your licence** listing all exceedances of licence limits (where applicable) and what they relate to e.g. air, water, noise.	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 2017, 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 - compliant; dust - compliant; surface water - compliant; groundwater - exceedance for Ammonical Nitrogen in BH-2 and exceedance for PAH's in BH-2, BH-3, PW-2 and PW-3.

Declaration:

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

	16.03.2018
Signature Group/Facility manager (or nominated, suitably qualified and experienced deputy)	Date

SELECT	cells that are highlighted blue cont
guidance document link	cells that contain underlined text c
Table heading *	table headings followed by a symb
Cells with red indicator in top right corner	cells that have a red indicator in th

Please note an interpretation of results is still required. This should be er
appropriately to fit your interpretation, if additional space is required plea
template should have all cells sized appropri

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

:lick to access relevant guidance documents for this section

ol have an associated footnote or instructions

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

ıtered in the additional information/comments boxes within the templates. Please size these boxes
se include an appendix to the AER template and merge it as part of the AER PDF document. The excel
ately so that all text is readable before it is converted to PDF document.

AIR-summary template	Lic No:	W0048-01	Year	2017

Answer all questions and complete all tables where relevant

			Additional information
1	Does your site have licensed air emissions? If yes please complete table A1 and A2 below for the current reporting year and answer further questions. If **you do not have** licenced emissions and **do not complete a solvent management plan** (table A4 and A5) you do not need to complete the tables	SELECT	Dust deposition monitoring was conducted at two monitoring locations Between Sep and Oct -2017 - results were below the EPA Waste Licence 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? Basic air monitoring checklist 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 therof	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence limit	Method of analysis	Annual mass load (kg)	Comments - reason for change in % mass load from previous year if applicable
	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

AIR-summary template	Lic No:	W0048-01	Year	2017

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

Table A2: Summary of average emissions -continuous monitoring

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

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

Table A3: Abatement system bypass reporting table Bypass protocol

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

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

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

AIR-summary template	Lic No:	W0048-01	Year	2017

Solvent use and management on site

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

SELECT

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

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

Reporting year	Total solvent input on site (kg)	Total VOC emissions to Air from entire site (direct and fugitive)	Total VOC emissions as %of solvent input	Total Emission Limit Value (ELV) in licence or any revision therof	Compliance
					SELECT
					SELECT

Table A5: Solvent Mass Balance summary

	(I) Inputs (kg)	(O) Outputs (kg)						
Solvent	(I) Inputs (kg)	Organic solvent emission in waste	Solvents lost in water (kg)	Collected waste solvent (kg)	Fugitive Organic Solvent (kg)	Solvent released in other ways e.g.	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 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 only need to complete table W1 and or W2 for storm water analysis and visual inspections	SELECT	Patel Tonra Ltd. conducted sampling of surface water on 28th of September 2017. Samples were obtained from surface water monitoring point SW-2. SW-1 and SW-3 were dry at the time of sampling. There were no exceedances of reference limit values.
2	Was it a requirement of your licence to carry out visual inspections on any surface water discharges or watercourses on or near your site? If yes please complete table W2 below summarising only any evidence of contamination noted during visual inspections	SELECT	No requirement to complete Table W2

Table W1 Storm water monitoring

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

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

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

Location Reference	Date of inspection	Description of contamination	Source of contamination	Corrective action	Comments
			SELECT		
			SELECT		

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

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

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

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

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

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

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)	Lic No:	W0048-01	Year	2017

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	
7	Do you have a proactive service contract for each piece of continuous monitoring equipment on site?	SELECT	
8	Did abatement system bypass occur during the reporting year? **If yes please complete table W5 below**	SELECT	

Table W4: Summary of average emissions -continuous monitoring

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

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

Table W5: Abatement system bypass reporting table

Date	Duration (hours)	Location	Resultant emissions	Reason for bypass	Corrective action*	Was a report submitted to the EPA?	When was this report submitted?
NOT APPLICABLE						SELECT	

*Measures taken or proposed to reduce or limit bypass frequency

Bund/Pipeline testing template	Lic No:	W0048-01	Year	2017	

Bund testing

dropdown menu click to see options

			Additional information
1	Are you required by your licence to undertake integrity testing on bunds and containment structures ? if yes please fill out table B1 below listing all **new bunds and containment structures** on site, in addition to **all bunds which failed** the integrity test-**all bunding structures which failed including mobile bunds must be listed in the table below, please include all bunds outside the licenced testing period** (mobile bunds and chemstore included)	Yes	
2	Please provide integrity testing frequency period	SELECT	
3	Does the site maintain a register of bunds, underground pipelines (including stormwater and foul), Tanks, sumps and containers? (containers refers to "Chemstore" type units and mobile bunds)	SELECT	
4	How many bunds are on site?		
5	How many of these bunds have been tested within the required test schedule?		
6	How many mobile bunds are on site?		
7	Are the mobile bunds included in the bund test schedule?	SELECT	
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	
12	If yes to Q11 are these failsafe systems included in a maintenance and testing programme?	SELECT	
13	Is the Fire Water Retention Pond included in your integrity test programme?	SELECT	

Table B1: Summary details of bund /containment structure integrity test

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

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

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

Pipeline/underground structure testing

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

*please note integrity testing means water tightness testing of all underground pipelines (as required under your licence)

Table B2: Summary details of pipeline/underground structures integrity test

Structure ID	Type system	Material of construction:	Does this structure have Secondary containment?	Type of secondary containment	Type integrity testing	Integrity reports maintained on site?	Results of test	Integrity test failure explanation <50 words	Corrective action taken	Scheduled date for retest	Results of retest(if in current reporting year)
	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT				SELECT

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

Groundwater/Soil monitoring template	Lic No:	W0048-01	Year	2017

			Comments	
1	Are you required to carry out groundwater monitoring as part of your licence requirements?	yes		Please provide an interpretation of groundwater monitoring data in the interpretation box below or if you require additional space please include a groundwater/contaminated land monitoring results interpretaion as an additional section in this AER
2	Are you required to carry out soil monitoring as part of your licence requirements?	no		
3	Do you extract groundwater for use on site? If yes please specify use in comment section	no		
4	Do monitoring results show that groundwater generic assessment criteria such as GTVs or IGVs are exceeded or is there an upward trend in results for a substance? If yes, please complete the Groundwater Monitoring Guideline Template Report (link in cell G8) and submit separately through ALDER as a licensee return AND answer questions 5-12 below. Groundwater monitoring template	no		
5	Is the contamination related to operations at the facility (either current and/or historic)	N/A	*NOT APPLICABLE*	
6	Have actions been taken to address contamination issues?If yes please summarise remediation strategies proposed/undertaken for the site	N/A	*NOT APPLICABLE*	
7	Please specify the proposed time frame for the remediation strategy	N/A	*NOT APPLICABLE*	
8	Is there a licence condition to carry out/update ELRA for the site?	N/A	*NOT APPLICABLE*	
9	Has any type of risk assesment been carried out for the site?	N/A	*NOT APPLICABLE*	
10	Has a Conceptual Site Model been developed for the site?	N/A	*NOT APPLICABLE*	
11	Have potential receptors been identified on and off site?	N/A	*NOT APPLICABLE*	
12	Is there evidence that contamination is migrating offsite?	N/A	*NOT APPLICABLE*	Please enter interpretation of data here

Table 1: Upgradient Groundwater monitoring results

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration++	Average Concentration+	unit	GTV's*	SELECT**	Upward trend in pollutant concentration over last 5 years of monitoring data
28/09/2017	BH-6	Aluminium	Lab analysis	Annually	0.026	0.018	mg/l	0.15		No
28/09/2017	BH-6	Ammoniacal Nitrogen	Lab analysis	Annually	0.3	0.250	mg/l	0.18		No
28/09/2017	BH-6	Arsenic	Lab analysis	Annually	0.0003	0.000	mg/l	0.008		No
28/09/2017	BH-6	Barium	Lab analysis	Annually	0.014	0.013	mg/l	-		No
28/09/2017	BH-6	Boron	Lab analysis	Annually	0.087	0.035	mg/l	0.75		No
28/09/2017	BH-6	Cadmium	Lab analysis	Annually	0.0001	0.000	mg/l	0.004		No
28/09/2017	BH-6	Calcium	Lab analysis	Annually	3.54	3.130	mg/l	-		No
28/09/2017	BH-6	Chloride	Lab analysis	Annually	12.6	11.440	mg/l	187.5		No
28/09/2017	BH-6	Chromium	Lab analysis	Annually	0.0032	0.003	mg/l	0.0375		No
28/09/2017	BH-6	Copper	Lab analysis	Annually	0.0047	0.002	mg/l	-		No
28/09/2017	BH-6	Cyanide	Lab analysis	Annually	0.05	0.050	mg/l	-		No
28/09/2017	BH-6	Electrical conductivity	On-site analysis	Annually	0.1	0.082	mS/cm	1.875		No
28/09/2017	BH-6	Faecal Coliforms	Lab analysis	Annually	18	7.333	cfus/ 100ml	-		No

Groundwater/Soil monitoring template					Lic No:	W0048-01		Year	2017	
28/09/2017	BH-6	Fluoride	Lab analysis	Annually	0.5	0.500	mg/l	-		No
28/09/2017	BH-6	Groundwater Level	On-site analysis	Annually	6.9	6.730	m bgl	-		No
28/09/2017	BH-6	Iron	Lab analysis	Annually	0.019	0.019	mg/l	-		No
28/09/2017	BH-6	Kjeldahl Nitrogen	Lab analysis	Annually	1	1.000	mg/l	-		No
28/09/2017	BH-6	Lead	Lab analysis	Annually	0.0004	0.000	mg/l	0.0075		No
28/09/2017	BH-6	Magnesium	Lab analysis	Annually	2.47	2.246	mg/l	-		No
28/09/2017	BH-6	Manganese	Lab analysis	Annually	0.032	0.020	mg/l	-		No
28/09/2017	BH-6	Mercury	Lab analysis	Annually	0.0002	0.000	mg/l	0.0008		No
28/09/2017	BH-6	Mineral Oils	Lab analysis	Annually	0.01	0.010	mg/l	-		No
28/09/2017	BH-6	Nickel	Lab analysis	Annually	0.0018	0.001	mg/l	-		No
28/09/2017	BH-6	Nitrate	Lab analysis	Annually	10.8	8.160	mg/l	37.5		No
28/09/2017	BH-6	Nitrite	Lab analysis	Annually	0.05	0.050	mg/l	0.375		No
28/09/2017	BH-6	Orthophosphate	Lab analysis	Annually	0.05	0.050	mg/l	-		No
28/09/2017	BH-6	pH	Lab analysis	Annually	8.1	6.920	pH units	-		No
28/09/2017	BH-6	Phosphorous, Total	Lab analysis	Annually	0.062	0.037	mg	-		No
28/09/2017	BH-6	PAHs (16)	Lab analysis	Annually	0.0002	0.000	mg/l	0.00008		No
28/09/2017	BH-6	Potassium	Lab analysis	Annually	2.34	1.970	mg/l	-		No
28/09/2017	BH-6	Selenium	Lab analysis	Annually	0.0009	0.001	mg/l	-		No
28/09/2017	BH-6	Silver	Lab analysis	Annually	0.0015	0.002	mg/l	-		No
28/09/2017	BH-6	Sodium	Lab analysis	Annually	8.94	7.782	mg/l	-		No
28/09/2017	BH-6	Sulphate	Lab analysis	Annually	6.9	5.380	mg/l	187.5		No
28/09/2017	BH-6	Total Alkalinity	Lab analysis	Annually	12	9.360	mg/l	-		No
28/09/2017	BH-6	Total Coliforms	Lab analysis	Annually	190	66.333	cfus/ 100ml	-		No
28/09/2017	BH-6	Total Organic Carbon	Lab analysis	Annually	3	3.000	mg/l	-		No
28/09/2017	BH-6	Total Oxidised	Lab analysis	Annually	2.5	1.918	mg/l	-		No
28/09/2017	BH-6	Total Solids	Lab analysis	Annually	214	136.60	mg/l	-		No
28/09/2017	BH-6	Zinc	Lab analysis	Annually	0.103	0.03	mg/l	0.075		No
							SELECT			SELECT
							SELECT			SELECT

.+ where average indicates arithmetic mean

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

Table 2: Downgradient Groundwater monitoring results

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration	Average Concentration	unit	GTV's*	SELECT**	Upward trend in yearly average pollutant concentration over last 5 years of monitoring data
28/09/2017	BH-2	Aluminium	Lab analysis	Annually	0.0029	0.00	mg/l	0.15		No

Groundwater/Soil monitoring template					Lic No:	W0048-01		Year	2017	
28/09/2017	BH-2	Ammoniacal Nitrogen	Lab analysis	Annually	0.218	0.20	mg/l	0.18		No
28/09/2017	BH-2	Arsenic	Lab analysis	Annually	0.0009	0.00	mg/l	0.008		No
28/09/2017	BH-2	Barium	Lab analysis	Annually	0.024	0.02	mg/l	-		No
28/09/2017	BH-2	Boron	Lab analysis	Annually	0.019	0.01	mg/l	0.75		No
28/09/2017	BH-2	Cadmium	Lab analysis	Annually	0.0001	0.00	mg/l	0.004		No
28/09/2017	BH-2	Calcium	Lab analysis	Annually	156	120.80	mg/l	-		No
28/09/2017	BH-2	Chloride	Lab analysis	Annually	21	18.40	mg/l	187.5		No
28/09/2017	BH-2	Chromium	Lab analysis	Annually	0.018	0.01	mg/l	0.0375		No
28/09/2017	BH-2	Copper	Lab analysis	Annually	0.0034	0.00	mg/l	-		No
28/09/2017	BH-2	Cyanide	Lab analysis	Annually	0.05	0.05	mg/l	-		No
28/09/2017	BH-2	Electrical conductivity	On-site analysis	Annually	0.7	0.66	mS/cm	1.875		No
28/09/2017	BH-2	Faecal Coliforms	Lab analysis	Annually	1100	561.00	cfus/ 100ml	-		No
28/09/2017	BH-2	Fluoride	Lab analysis	Annually	0.5	0.50	mg/l	-		No
28/09/2017	BH-2	Groundwater Level	On-site analysis	Annually	3.77	3.19	m bgl	-		No
28/09/2017	BH-2	Iron	Lab analysis	Annually	0.02	0.02	mg/l	-		No
28/09/2017	BH-2	Kjeldahl Nitrogen	Lab analysis	Annually	1	1.00	mg/l	-		No
28/09/2017	BH-2	Lead	Lab analysis	Annually	0.00008	0.00	mg/l	0.0075		No
28/09/2017	BH-2	Magnesium	Lab analysis	Annually	7.75	5.84	mg/l	-		No
28/09/2017	BH-2	Manganese	Lab analysis	Annually	1.27	0.25	mg/l	-		No
28/09/2017	BH-2	Mercury	Lab analysis	Annually	0.00001	0.00	mg/l	0.0008		No
28/09/2017	BH-2	Mineral Oils	Lab analysis	Annually	0.01	0.01	mg/l	-		No
28/09/2017	BH-2	Nickel	Lab analysis	Annually	0.003	0.00	mg/l	-		No
28/09/2017	BH-2	Nitrate	Lab analysis	Annually	7.1	5.12	mg/l	37.5		No
28/09/2017	BH-2	Nitrite	Lab analysis	Annually	0.05	0.05	mg/l	0.375		No
28/09/2017	BH-2	Orthophosphate	Lab analysis	Annually	0.05	0.05	mg/l	-		No
28/09/2017	BH-2	pH	Lab analysis	Annually	8.8	7.70	pH units	-		No
28/09/2017	BH-2	Phosphorous, Total	Lab analysis	Annually	0.52	0.20	mg	-		No
28/09/2017	BH-2	PAHs (16)	Lab analysis	Annually	0.0002	0.00	mg/l	0.00008		No
28/09/2017	BH-2	Potassium	Lab analysis	Annually	2.34	1.82	mg/l	-		No
28/09/2017	BH-2	Selenium	Lab analysis	Annually	0.003	0.00	mg/l	-		No
28/09/2017	BH-2	Silver	Lab analysis	Annually	0.0015	0.00	mg/l	-		No
28/09/2017	BH-2	Sodium	Lab analysis	Annually	15.6	11.44	mg/l	-		No
28/09/2017	BH-2	Sulphate	Lab analysis	Annually	66.4	44.12	mg/l	187.5		No
28/09/2017	BH-2	Total Alkalinity	Lab analysis	Annually	325	292.00	mg/l	-		No
28/09/2017	BH-2	Total Coliforms	Lab analysis	Annually	8800	1112.00	cfus/ 100ml	-		No
28/09/2017	BH-2	Total Organic Carbon	Lab analysis	Annually	3	3.00	mg/l	-		No
28/09/2017	BH-2	Total Oxidised	Lab analysis	Annually	1.61	1.16	mg/l	-		No

Groundwater/Soil monitoring template					Lic No:	W0048-01		Year	2017	
28/09/2017	BH-2	Total Solids	Lab analysis	Annually	733	595.80	mg/l	-		No
28/09/2017	BH-2	Zinc	Lab analysis	Annually	0.0065	0.00	mg/l	0.075		No
28/09/2017	BH-3	Aluminium	Lab analysis	Annually	0.003	0.00	mg/l	0.15		No
28/09/2017	BH-3	Ammoniacal Nitrogen	Lab analysis	Annually	0.4	0.30	mg/l	0.18		No
28/09/2017	BH-3	Arsenic	Lab analysis	Annually	0.0004	0.00	mg/l	0.008		No
28/09/2017	BH-3	Barium	Lab analysis	Annually	0.03	0.03	mg/l	-		No
28/09/2017	BH-3	Boron	Lab analysis	Annually	0.026	0.02	mg/l	0.75		No
28/09/2017	BH-3	Cadmium	Lab analysis	Annually	0.0001	0.00	mg/l	0.004		No
28/09/2017	BH-3	Calcium	Lab analysis	Annually	117	101.80	mg/l	-		No
28/09/2017	BH-3	Chloride	Lab analysis	Annually	19	17.40	mg/l	187.5		No
28/09/2017	BH-3	Chromium	Lab analysis	Annually	0.027	0.01	mg/l	0.0375		No
28/09/2017	BH-3	Copper	Lab analysis	Annually	0.0017	0.00	mg/l	-		No
28/09/2017	BH-3	Cyanide	Lab analysis	Annually	0.05	0.05	mg/l	-		No
28/09/2017	BH-3	Electrical conductivity	On-site analysis	Annually	0.612	0.59	mS/cm	1.875		No
28/09/2017	BH-3	Faecal Coliforms	Lab analysis	Annually	18	9.00	cfus/ 100ml	-		No
28/09/2017	BH-3	Fluoride	Lab analysis	Annually	0.5	0.50	mg/l	-		No
28/09/2017	BH-3	Groundwater Level	On-site analysis	Annually	6.98	6.37	m bgl	-		No
28/09/2017	BH-3	Iron	Lab analysis	Annually	0.08	0.05	mg/l	-		No
28/09/2017	BH-3	Kjeldahl Nitrogen	Lab analysis	Annually	1	1.00	mg/l	-		No
28/09/2017	BH-3	Lead	Lab analysis	Annually	0.00038	0.00	mg/l	0.0075		No
28/09/2017	BH-3	Magnesium	Lab analysis	Annually	6.59	6.00	mg/l	-		No
28/09/2017	BH-3	Manganese	Lab analysis	Annually	0.173	0.04	mg/l	-		No
28/09/2017	BH-3	Mercury	Lab analysis	Annually	0.00001	0.00	mg/l	0.0008		No
28/09/2017	BH-3	Mineral Oils	Lab analysis	Annually	0.07	0.04	mg/l	-		No
28/09/2017	BH-3	Nickel	Lab analysis	Annually	0.088	0.02	mg/l	-		No
28/09/2017	BH-3	Nitrate	Lab analysis	Annually	5	4.48	mg/l	37.5		No
28/09/2017	BH-3	Nitrite	Lab analysis	Annually	0.05	0.05	mg/l	0.375		No
28/09/2017	BH-3	Orthophosphate	Lab analysis	Annually	0.85	0.45	mg/l	-		No
28/09/2017	BH-3	pH	Lab analysis	Annually	8.3	8.00	pH units	-		No
28/09/2017	BH-3	Phosphorous, Total	Lab analysis	Annually	0.79	0.35	mg	-		No
28/09/2017	BH-3	PAHs (16)	Lab analysis	Annually	0.0004	0.00	mg/l	0.00008		No
28/09/2017	BH-3	Potassium	Lab analysis	Annually	2.34	1.73	mg/l	-		No
28/09/2017	BH-3	Selenium	Lab analysis	Annually	0.0019	0.00	mg/l	-		No
28/09/2017	BH-3	Silver	Lab analysis	Annually	0.002	0.00	mg/l	-		No
28/09/2017	BH-3	Sodium	Lab analysis	Annually	13.3	11.86	mg/l	-		No
28/09/2017	BH-3	Sulphate	Lab analysis	Annually	56	47.00	mg/l	187.5		No
28/09/2017	BH-3	Total Alkalinity	Lab analysis	Annually	305	261.40	mg/l	-		No
28/09/2017	BH-3	Total Coliforms	Lab analysis	Annually	50000	10.50	cfus/ 100ml	-		No

Groundwater/Soil monitoring template					Lic No:	W0048-01		Year	2017	
28/09/2017	BH-3	Total Organic Carbon	Lab analysis	Annually	3	3.00	mg/l	-		No
28/09/2017	BH-3	Total Oxidised	Lab analysis	Annually	1.27	1.04	mg/l	-		No
28/09/2017	BH-3	Total Solids	Lab analysis	Annually	2450	897.60	mg/l	-		No
28/09/2017	BH-3	Zinc	Lab analysis	Annually	0.007	0.00	mg/l	0.075		No
28/09/2017	BH-7	Aluminium	Lab analysis	Annually	0.017	0.02	mg/l	0.15		No
28/09/2017	BH-7	Ammoniacal Nitrogen	Lab analysis	Annually	0.2	0.20	mg/l	0.18		No
28/09/2017	BH-7	Arsenic	Lab analysis	Annually	0.0008	0.00	mg/l	0.008		No
28/09/2017	BH-7	Barium	Lab analysis	Annually	0.049	0.03	mg/l	-		No
28/09/2017	BH-7	Boron	Lab analysis	Annually	0.057	0.04	mg/l	0.75		No
28/09/2017	BH-7	Cadmium	Lab analysis	Annually	0.0001	0.00	mg/l	0.004		No
28/09/2017	BH-7	Calcium	Lab analysis	Annually	172	114.33	mg/l	-		No
28/09/2017	BH-7	Chloride	Lab analysis	Annually	18	15.23	mg/l	187.5		No
28/09/2017	BH-7	Chromium	Lab analysis	Annually	0.029	0.02	mg/l	0.0375		No
28/09/2017	BH-7	Copper	Lab analysis	Annually	0.003	0.00	mg/l	-		No
28/09/2017	BH-7	Cyanide	Lab analysis	Annually	0.05	0.05	mg/l	-		No
28/09/2017	BH-7	Electrical conductivity	On-site analysis	Annually	0.97	0.80	mS/cm	1.875		No
28/09/2017	BH-7	Faecal Coliforms	Lab analysis	Annually	1000	500.00	cfus/ 100ml	-		No
28/09/2017	BH-7	Fluoride	Lab analysis	Annually	0.5	0.50	mg/l	-		No
28/09/2017	BH-7	Groundwater Level	On-site analysis	Annually	4.45	3.45	m bgl	-		No
28/09/2017	BH-7	Iron	Lab analysis	Annually	0.053	0.05	mg/l	-		No
28/09/2017	BH-7	Kjeldahl Nitrogen	Lab analysis	Annually	1	1.00	mg/l	-		No
28/09/2017	BH-7	Lead	Lab analysis	Annually	0.00016	0.00	mg/l	0.0075		No
28/09/2017	BH-7	Magnesium	Lab analysis	Annually	10.5	7.68	mg/l	-		No
28/09/2017	BH-7	Manganese	Lab analysis	Annually	0.001	0.00	mg/l	-		No
28/09/2017	BH-7	Mercury	Lab analysis	Annually	0.00006	0.00	mg/l	0.0008		No
28/09/2017	BH-7	Mineral Oils	Lab analysis	Annually	5.42	1.82	mg/l	-		No
28/09/2017	BH-7	Nickel	Lab analysis	Annually	0.0044	0.00	mg/l	-		No
28/09/2017	BH-7	Nitrate	Lab analysis	Annually	2.21	1.66	mg/l	37.5		No
28/09/2017	BH-7	Nitrite	Lab analysis	Annually	0.05	0.05	mg/l	0.375		No
28/09/2017	BH-7	Orthophosphate	Lab analysis	Annually	0.09	0.08	mg/l	-		No
28/09/2017	BH-7	pH	Lab analysis	Annually	8.3	7.63	pH units	-		No
28/09/2017	BH-7	Phosphorous, Total	Lab analysis	Annually	0.869	0.46	mg	-		No
28/09/2017	BH-7	PAHs (16)	Lab analysis	Annually	0.0006	0.00	mg/l	0.00008		No
28/09/2017	BH-7	Potassium	Lab analysis	Annually	2.34	2.10	mg/l	-		No
28/09/2017	BH-7	Selenium	Lab analysis	Annually	0.0015	0.00	mg/l	-		No
28/09/2017	BH-7	Silver	Lab analysis	Annually	0.0015	0.00	mg/l	-		No
28/09/2017	BH-7	Sodium	Lab analysis	Annually	17.9	13.33	mg/l	-		No
28/09/2017	BH-7	Sulphate	Lab analysis	Annually	120	76.33	mg/l	187.5		No

Groundwater/Soil monitoring template					Lic No:	W0048-01		Year	2017	
28/09/2017	BH-7	Total Alkalinity	Lab analysis	Annually	390	265.67	mg/l	-		No
28/09/2017	BH-7	Total Coliforms	Lab analysis	Annually	0	1000.00	cfus/ 100ml	-		No
28/09/2017	BH-7	Total Organic Carbon	Lab analysis	Annually	6.41	5.06	mg/l	-		No
28/09/2017	BH-7	Total Oxidised Nitrogen	Lab analysis	Annually	0.5	0.38	mg/l	-		No
28/09/2017	BH-7	Total Solids	Lab analysis	Annually	2404	1381.33	mg/l	-		No
28/09/2017	BH-7	Zinc	Lab analysis	Annually	0.006	0.00	mg/l	0.075		No
28/09/2017	BH-8	Aluminium	Lab analysis	Annually	0.004	0.00	mg/l	0.15		No
28/09/2017	BH-8	Ammoniacal Nitrogen	Lab analysis	Annually	0.2	0.20	mg/l	0.18		No
28/09/2017	BH-8	Arsenic	Lab analysis	Annually	0.0006	0.00	mg/l	0.008		No
28/09/2017	BH-8	Barium	Lab analysis	Annually	0.015	0.01	mg/l	-		No
28/09/2017	BH-8	Boron	Lab analysis	Annually	0.022	0.02	mg/l	0.75		No
28/09/2017	BH-8	Cadmium	Lab analysis	Annually	0.0001	0.00	mg/l	0.004		No
28/09/2017	BH-8	Calcium	Lab analysis	Annually	148	141.50	mg/l	-		No
28/09/2017	BH-8	Chloride	Lab analysis	Annually	22.3	21.90	mg/l	187.5		No
28/09/2017	BH-8	Chromium	Lab analysis	Annually	0.03	0.02	mg/l	0.0375		No
28/09/2017	BH-8	Copper	Lab analysis	Annually	0.0009	0.00	mg/l	-		No
28/09/2017	BH-8	Cyanide	Lab analysis	Annually	0.05	0.05	mg/l	-		No
28/09/2017	BH-8	Electrical conductivity	On-site analysis	Annually	0.77	0.74	mS/cm	1.875		No
28/09/2017	BH-8	Faecal Coliforms	Lab analysis	Annually	0	#DIV/0!	cfus/ 100ml	-		No
28/09/2017	BH-8	Fluoride	Lab analysis	Annually	0.5	0.50	mg/l	-		No
28/09/2017	BH-8	Groundwater Level	On-site analysis	Annually	2.96	2.67	m bgl	-		No
28/09/2017	BH-8	Iron	Lab analysis	Annually	0.019	0.02	mg/l	-		No
28/09/2017	BH-8	Kjeldahl Nitrogen	Lab analysis	Annually	1	1.00	mg/l	-		No
28/09/2017	BH-8	Lead	Lab analysis	Annually	0.00002	0.00	mg/l	0.0075		No
28/09/2017	BH-8	Magnesium	Lab analysis	Annually	7.46	7.44	mg/l	-		No
28/09/2017	BH-8	Manganese	Lab analysis	Annually	0.001	0.00	mg/l	-		No
28/09/2017	BH-8	Mercury	Lab analysis	Annually	0.00001	0.00	mg/l	0.0008		No
28/09/2017	BH-8	Mineral Oils	Lab analysis	Annually	0.01	0.01	mg/l	-		No
28/09/2017	BH-8	Nickel	Lab analysis	Annually	0.003	0.00	mg/l	-		No
28/09/2017	BH-8	Nitrate	Lab analysis	Annually	17.3	11.25	mg/l	37.5		No
28/09/2017	BH-8	Nitrite	Lab analysis	Annually	0.05	0.05	mg/l	0.375		No
28/09/2017	BH-8	Orthophosphate	Lab analysis	Annually	0.05	0.05	mg/l	-		No
28/09/2017	BH-8	pH	Lab analysis	Annually	8.2	7.60	pH units	-		No
28/09/2017	BH-8	Phosphorous, Total	Lab analysis	Annually	0.876	0.75	mg	-		No
28/09/2017	BH-8	PAHs (16)	Lab analysis	Annually	0.0002	0.00	mg/l	0.00008		No

Groundwater/Soil monitoring template					Lic No:	W0048-01		Year	2017	
28/09/2017	BH-8	Potassium	Lab analysis	Annually	2.34	2.34	mg/l	-		No
28/09/2017	BH-8	Selenium	Lab analysis	Annually	0.001	0.00	mg/l	-		No
28/09/2017	BH-8	Silver	Lab analysis	Annually	0.0015	0.00	mg/l	-		No
28/09/2017	BH-8	Sodium	Lab analysis	Annually	16.5	15.35	mg/l	-		No
28/09/2017	BH-8	Sulphate	Lab analysis	Annually	64.1	63.65	mg/l	187.5		No
28/09/2017	BH-8	Total Alkalinity	Lab analysis	Annually	360	320.00	mg/l	-		No
28/09/2017	BH-8	Total Coliforms	Lab analysis	Annually	0	100.00	cfus/ 100ml	-		No
28/09/2017	BH-8	Total Organic Carbon	Lab analysis	Annually	3	3.00	mg/l	-		No
28/09/2017	BH-8	Total Oxidised	Lab analysis	Annually	3.92	2.56	mg/l	-		No
28/09/2017	BH-8	Total Solids	Lab analysis	Annually	1720	1535.00	mg/l	-		No
28/09/2017	BH-8	Zinc	Lab analysis	Annually	0.001	0.00	mg/l	0.075		No
28/09/2017	PW-2	Aluminium	Lab analysis	Annually	0.003	0.00	mg/l	0.15		No
28/09/2017	PW-2	Ammoniacal Nitrogen	Lab analysis	Annually	0.9	0.90	mg/l	0.18		No
28/09/2017	PW-2	Arsenic	Lab analysis	Annually	0.0002	0.00	mg/l	0.008		No
28/09/2017	PW-2	Barium	Lab analysis	Annually	0.03	0.02	mg/l	-		No
28/09/2017	PW-2	Boron	Lab analysis	Annually	0.021	0.02	mg/l	0.75		No
28/09/2017	PW-2	Cadmium	Lab analysis	Annually	0	#DIV/0!	mg/l	0.004		No
28/09/2017	PW-2	Calcium	Lab analysis	Annually	101	85.87	mg/l	-		No
28/09/2017	PW-2	Chloride	Lab analysis	Annually	15.8	14.97	mg/l	187.5		No
28/09/2017	PW-2	Chromium	Lab analysis	Annually	0	#DIV/0!	mg/l	0.0375		No
28/09/2017	PW-2	Copper	Lab analysis	Annually	0.021	0.02	mg/l	-		No
28/09/2017	PW-2	Cyanide	Lab analysis	Annually	0	#DIV/0!	mg/l	-		No
28/09/2017	PW-2	Electrical conductivity	On-site analysis	Annually	0.52	0.50	mS/cm	1.875		No
28/09/2017	PW-2	Faecal Coliforms	Lab analysis	Annually	18	9.00	cfus/ 100ml	-		No
28/09/2017	PW-2	Fluoride	Lab analysis	Annually	0	#DIV/0!	mg/l	-		No
28/09/2017	PW-2	Groundwater Level	On-site analysis	Annually	0	0.00	m bgl	-		No
28/09/2017	PW-2	Iron	Lab analysis	Annually	0.093	0.09	mg/l	-		No
28/09/2017	PW-2	Kjeldahl Nitrogen	Lab analysis	Annually	0	#DIV/0!	mg/l	-		No
28/09/2017	PW-2	Lead	Lab analysis	Annually	0.0037	0.00	mg/l	0.0075		No
28/09/2017	PW-2	Magnesium	Lab analysis	Annually	4.71	4.44	mg/l	-		No
28/09/2017	PW-2	Manganese	Lab analysis	Annually	0.0013	0.00	mg/l	-		No
28/09/2017	PW-2	Mercury	Lab analysis	Annually	0	#DIV/0!	mg/l	0.0008		No
28/09/2017	PW-2	Mineral Oils	Lab analysis	Annually	0.05	0.05	mg/l	-		No
28/09/2017	PW-2	Nickel	Lab analysis	Annually	0.0014	0.00	mg/l	-		No
28/09/2017	PW-2	Nitrate	Lab analysis	Annually	13	10.03	mg/l	37.5		No
28/09/2017	PW-2	Nitrite	Lab analysis	Annually	0	#DIV/0!	mg/l	0.375		No
28/09/2017	PW-2	Orthophosphate	Lab analysis	Annually	0.061	0.06	mg/l	-		No

Groundwater/Soil monitoring template					Lic No:	W0048-01		Year	2017	
28/09/2017	PW-2	pH	Lab analysis	Annually	7.27	7.15	pH units	-		No
28/09/2017	PW-2	Phosphorous, Total	Lab analysis	Annually	0	#DIV/0!	mg	-		No
28/09/2017	PW-2	PAHs (16)	Lab analysis	Annually	0.0003	#DIV/0!	mg/l	0.00008		No
28/09/2017	PW-2	Potassium	Lab analysis	Annually	2.93	2.61	mg/l	-		No
28/09/2017	PW-2	Selenium	Lab analysis	Annually	0.0007	0.00	mg/l	-		No
28/09/2017	PW-2	Silver	Lab analysis	Annually	0	#DIV/0!	mg/l	-		No
28/09/2017	PW-2	Sodium	Lab analysis	Annually	10.8	9.95	mg/l	-		No
28/09/2017	PW-2	Sulphate	Lab analysis	Annually	33.3	21.60	mg/l	187.5		No
28/09/2017	PW-2	Total Alkalinity	Lab analysis	Annually	235	221.33	mg/l	-		No
28/09/2017	PW-2	Total Coliforms	Lab analysis	Annually	940	940.00	cfus/ 100ml	-		No
28/09/2017	PW-2	Total Organic Carbon	Lab analysis	Annually	0	#DIV/0!	mg/l	-		No
28/09/2017	PW-2	Total Oxidised	Lab analysis	Annually	2.95	2.29	mg/l	-		No
28/09/2017	PW-2	Total Solids	Lab analysis	Annually	311	300.33	mg/l	-		No
28/09/2017	PW-2	Zinc	Lab analysis	Annually	0.023	0.02	mg/l	0.075		No
28/09/2017	PW-3	Aluminium	Lab analysis	Annually	0.008	0.00	mg/l	0.15		No
28/09/2017	PW-3	Ammoniacal Nitrogen	Lab analysis	Annually	0.5	0.35	mg/l	0.18		No
28/09/2017	PW-3	Arsenic	Lab analysis	Annually	0.0005	0.00	mg/l	0.008		No
28/09/2017	PW-3	Barium	Lab analysis	Annually	0.002	0.00	mg/l	-		No
28/09/2017	PW-3	Boron	Lab analysis	Annually	0.019	0.02	mg/l	0.75		No
28/09/2017	PW-3	Cadmium	Lab analysis	Annually	0.0001	0.00	mg/l	0.004		No
28/09/2017	PW-3	Calcium	Lab analysis	Annually	44.3	36.64	mg/l	-		No
28/09/2017	PW-3	Chloride	Lab analysis	Annually	16.1	15.22	mg/l	187.5		No
28/09/2017	PW-3	Chromium	Lab analysis	Annually	0.003	0.00	mg/l	0.0375		No
28/09/2017	PW-3	Copper	Lab analysis	Annually	0.009	0.00	mg/l	-		No
28/09/2017	PW-3	Cyanide	Lab analysis	Annually	0.05	0.05	mg/l	-		No
28/09/2017	PW-3	Electrical conductivity	On-site analysis	Annually	0.42	0.37	mS/cm	1.875		No
28/09/2017	PW-3	Faecal Coliforms	Lab analysis	Annually	31	10.33	cfus/ 100ml	-		No
28/09/2017	PW-3	Fluoride	Lab analysis	Annually	0.5	0.50	mg/l	-		No
28/09/2017	PW-3	Iron	Lab analysis	Annually	0.328	0.15	mg/l	-		No
28/09/2017	PW-3	Kjeldahl Nitrogen	Lab analysis	Annually	1	1.00	mg/l	-		No
28/09/2017	PW-3	Lead	Lab analysis	Annually	0.0015	0.00	mg/l	0.0075		No
28/09/2017	PW-3	Magnesium	Lab analysis	Annually	15.9	14.70	mg/l	-		No
28/09/2017	PW-3	Manganese	Lab analysis	Annually	0.0159	0.01	mg/l	-		No
28/09/2017	PW-3	Mercury	Lab analysis	Annually	0.00001	0.00	mg/l	0.0008		No
28/09/2017	PW-3	Mineral Oils	Lab analysis	Annually	0.159	0.11	mg/l	-		No
28/09/2017	PW-3	Nickel	Lab analysis	Annually	0.0009	0.00	mg/l	-		No
28/09/2017	PW-3	Nitrate	Lab analysis	Annually	5.36	3.94	mg/l	37.5		No
28/09/2017	PW-3	Nitrite	Lab analysis	Annually	0.07	0.07	mg/l	0.375		No

Groundwater/Soil monitoring template					Lic No:	W0048-01		Year	2017	
28/09/2017	PW-3	Orthophosphate	Lab analysis	Annually	0.063	0.06	mg/l	-		No
28/09/2017	PW-3	pH	Lab analysis	Annually	8.1	7.90	pH units	-		No
28/09/2017	PW-3	Phosphorous, Total	Lab analysis	Annually	0.04	0.03	mg	-		No
28/09/2017	PW-3	PAHs (16)	Lab analysis	Annually	0.0003	0.00	mg/l	0.00008		No
28/09/2017	PW-3	Potassium	Lab analysis	Annually	2.34	1.72	mg/l	-		No
28/09/2017	PW-3	Selenium	Lab analysis	Annually	0.0005	0.00	mg/l	-		No
28/09/2017	PW-3	Silver	Lab analysis	Annually	0.0015	0.00	mg/l	-		No
28/09/2017	PW-3	Sodium	Lab analysis	Annually	14.3	13.70	mg/l	-		No
28/09/2017	PW-3	Sulphate	Lab analysis	Annually	20.6	12.76	mg/l	187.5		No
28/09/2017	PW-3	Total Alkalinity	Lab analysis	Annually	165	152.40	mg/l	-		No
28/09/2017	PW-3	Total Coliforms	Lab analysis	Annually	290	21.33	cfus/ 100ml	-		No
28/09/2017	PW-3	Total Organic Carbon	Lab analysis	Annually	3	3.00	mg/l	-		No
28/09/2017	PW-3	Total Oxidised	Lab analysis	Annually	1.2	0.90	mg/l	-		No
28/09/2017	PW-3	Total Solids	Lab analysis	Annually	240	207.40	mg/l	-		No
28/09/2017	PW-3	Zinc	Lab analysis	Annually	0.013	0.01	mg/l	0.075		No
							SELECT			SELECT
							SELECT			SELECT

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

Groundwater monitoring template

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

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

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

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

Groundwater/Soil monitoring template Lic No: W0048-01 Year 2017

Table 3: Soil results

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

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

Environmental Liabilities template	Lic No:	W0048-01	Year	2017

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

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

Environmental Management Programme/Continuous Improvement Programme template

Lic No: W0048-01 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	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	

Environmental Management Programme (EMP) report

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

Noise monitoring summary report	Lic No:	W0048-01	Year	2017

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

Table N1: Noise monitoring summary

Date of monitoring	Time period	Noise location (on site)	Noise sensitive location -NSL (if applicable)	LA_{eq}	LA_{90}	LA_{10}	LA_{max}	Tonal or Impulsive noise* (Y/N)	If tonal /impulsive noise was identified was 5dB penalty applied?	Comments (ex. main noise sources on site, & extraneous noise ex. road traffic)	Is site compliant with noise limits (day/evening/night)?
31/08/2017	09:40-10:10		NSL1	38	33	38	68	No	Yes	The dominant noise source in the vicinity of NSL3 is traffic on the N11 dual-carriageway, which runs east of the Marrakesh site.	Yes
31/08/2017	11:29-11:59		NSL1	41	35	43	68	No	Yes		Yes
31/08/2017	13:19-13:49		NSL1	48	40	44	74	No	Yes		Yes
31/08/2017	09:02-09:32		NSL2	53	48	56	76	No	Yes		Yes
31/08/2017	10:53-11:23		NSL2	52	48	53	74	No	Yes		Yes
31/08/2017	12:43-13:13		NSL2	52	48	53	77	No	Yes		Yes
31/08/2017	08:28-08:58		NSL3	62	59	63	72	No	Yes		No
31/08/2017	10:17-10:47		NSL3	61	57	63	76	No	Yes		No
31/08/2017	12:08-12:38		NSL3	63	58	34	54	No	Yes		No

*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? nothing**

** 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	2017

			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
2	Is the site a member of any accredited programmes for reducing energy usage/water conservation such as the SEAI programme linked to the right? If yes please list them in additional information	No	
3	Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional information	SELECT	

SEAI - Large Industry Energy Network (LIEN)

Table R1 Energy usage on site

Energy Use	Previous year	Current year	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*
Total Energy Used (MWHrs)	579.15	653.88	12.90%	
Total Energy Generated (MWHrs)				
Total Renewable Energy Generated (MWHrs)				
Electricity Consumption (MWHrs)	4.6	5.1	10.87%	
Fossil Fuels Consumption:				
Heavy Fuel Oil (m3)	56.5	63.8	12.92%	
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	
Water use	Water extracted Previous year m3/yr.	Water extracted Current year m3/yr.	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*	Volume Discharged back to environment(m^3yr):	Volume used i.e not discharged to environment e.g. released as steam m3/yr	Unaccounted for Water:
Groundwater							
Surface water							
Public supply							
Recycled water							
Total							

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

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

Table R3 Waste Stream Summary

	Total	Landfill	Incineration	Recycled	Other

Resource Usage/Energy efficiency summary				Lic No: W0048-01	Year 2017
Hazardous (Tonnes)					0.12
Non-Hazardous (Tonnes)	159.58	73.34		86.24	

Resource Usage/Energy efficiency summary Lic No: W0048-01 Year 2017

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					

Complaints and Incidents summary template

Lic No: W0048-01 Year 2017

Complaints

Have you received any environmental complaints in the current reporting year? If yes please complete summary details of complaints received on site in table 1 below	No	Additional information

Table 1 Complaints summary

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

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

Incidents

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

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

Table 2 Incidents summary

Date of occurrence	Incident nature	Location of occurrence	Incident category*please refer to guidance	Receptor	Cause of incident	Other cause(please specify)	Activity in progress at time of incident	Communication	Occurrence	Corrective action<20 words	Preventative action <20 words	Resolution status	Resolution date	Likelihood of reoccurence
28/09/2017	Trigger level reached	Licenced discharge point (typ	1. Minor	No Uncontrolled release	Other (add details	Undetermined at p	Normal activities	EPA	New	Re-sampling scheduled	None deemed	Ongoing	Not Decided	Low
	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	1
% reduction/ increase	0

WASTE SUMMARY	Lic No:	W0048-01	Year	2017
SECTION A-PRTR ON SITE WASTE TREATMENT AND WASTE TRANSFERS TAB- TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES		PRTR facility logon	dropdown list click to see options	

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

			Additional Information
1	Were any wastes accepted onto your site for recovery or disposal or treatment prior to recovery or disposal within the boundaries of your facility ?; (waste generated within your boundaries is to be captured through PRTR reporting) If yes please enter details in table 1 below	Yes	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 2017 no material was landfilled at the facility. Any materials which were not sold from the facility are temporarily stored on site 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	No	
3	Was waste accepted onto your site that was generated outside the Republic of Ireland? If yes please state the quantity in tonnes in additional information	No	

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

Licenced annual tonnage limit for your site (total tonnes/annum)	EWC code European Waste Catalogue EWC codes	Source of waste accepted	Description of waste accepted **Please enter an accurate and detailed description - which applies to relevant EWC code** European Waste Catalogue EWC codes	Quantity of waste accepted in current reporting year (tonnes)	Quantity of waste accepted in previous reporting year (tonnes)	Reduction/ Increase over previous year +/ - %	Reason for reduction/ increase from previous reporting year	Packaging Content (%)- only applies if the waste has a packaging component	Disposal/Recovery or treatment operation carried out at your site and the description of this operation	Quantity of waste remaining on site at the end of reporting year (tonnes)	Comments -
100000	*17 01 01*	*17- CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)*	*Concrete*	**62,679.91**	*48,116.88*	30%	*Market demand*	*0%*	*R5-Recycling/reclamation or other inorganic materials which includes soil celaning resuling in recovery of the soil and recycling of inorganic construction materials*	*37,757*	*Qty remaining on site is the difference of material IN vs. OUT for 2017*
100000	*17 05 04*	*17- CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)*	*Clay (No. 2 Soil)*	**9,640.65**	*14,030.58*	-31%	*Market demand*	*0%*	*R5-Recycling/reclamation or other inorganic materials which includes soil celaning resuling in recovery of the soil and recycling of inorganic construction materials*	*2,869*	*Qty remaining on site is the difference of material IN vs. OUT for 2017*
100000	*17 09 04*	*17- CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)*	*Sand and Stone*	**1,849.08**	*3,886.98*	-52%	*Market demand*	*0%*	*R5-Recycling/reclamation or other inorganic materials which includes soil celaning resuling in recovery of the soil and recycling of inorganic construction materials*	*1,849*	*Qty remaining on site is the difference of material IN vs. OUT for 2017*
100000	*17 03 02*	*17- CONSTRUCTION AND DEMOLITION WASTES*	*Bituminous Mixtures*	**10,038.64**	*8,443.84*	19%	*Market demand*	*0%*	*R5-Recycling/reclamation or other inorganic materials which*	*3,961*	*Qty remaining 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	SELECT
5	Is all waste storage infrastructure as required by your licence and approved by the Agency in place? If no please list waste storage infrastructure required on site	SELECT
6	Does your facility have relevant nuisance controls in place?	SELECT

WASTE SUMMARY	Lic No:	W0048-01	Year	2017

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

SECTION D-TO BE COMPLETED BY LANDFILL SITES ONLY

Table 2 Waste type and tonnage-landfill only

Waste types permitted for disposal	Authorised/licenced annual intake for disposal (tpa)	Actual intake for disposal in reporting year (tpa)	Remaining licensed capacity at end of reporting year (m3)	Comments
C&D	100,000	0		

Table 3 General information-Landfill only

Area ID	Date landfilling commenced	Date landfilling ceased	Currently landfilling	Private or Public Operated	Inert or non-hazardous	Predicted date to cease landfilling	Licence permits asbestos	Is there a separate cell for asbestos?	Accepted asbestos in reporting year	Total disposal area occupied by waste	Lined disposal area occupied by waste
										SELECT UNIT	SELECT UNIT
Entire LF	2000	N/A	No	Private	Inert		No				

WASTE SUMMARY	Lic No:	W0048-01	Year	2017

Table 4 Environmental monitoring-landfill only

Landfill Manual-Monitoring Standards

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

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

Table 5 Capping-Landfill only

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

*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?	No
10	Is leachate released to surface water? If yes please complete leachate mass load information below	SELECT

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	

Unlined area	Comments on liner type
SELECT UNIT	
	Not lined

Environmental Protection Agency

Guidance to completing the PRTR workbook

PRTR Returns Workbook

Version 1.1.19

REFERENCE YEAR	2017

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	Luke Martin
AER Returns Contact Email Address	lukem@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	7
User Feedback/Comments	The increase in General Waste and Ferrous Metals leaving the site is due to an increase of materials accepted onto the site and the resulting increased activity on the site in 2017. NACE code to be changed to 3832 and Main Econmic Activity to be changed to 'Recover of sorted materials' by Marrakesh company director.
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

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO AIR					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD				QUANTITY		
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or 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 AIR					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD				QUANTITY		
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or 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/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

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

Additional Data Requested from Landfill operators

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

Landfill: Kilmurry South

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

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

Please enter all quantities on this sheet in Tonnes

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	**17 01 01**	**No**	24923.4	concrete	R5	M	Weighed	Onsite of generati	Marrkesh Ltd,W0048-01	Kilmurry South Landfill,Kilmacanogue,Bray, Co. Wicklow,Ireland		
Within the Country	17 03 02	No	6077.51	bituminous mixtures containing other than those mentioned in 17 03 01	R5	M	Weighed	Onsite of generati	Marrkesh Ltd,W0048-01	Kilmurry South Landfill,Kilmacanogue,Bray, Co. Wicklow,Ireland		
Within the Country	17 05 04	No	4443.98	soil and stones other than those mentioned in 17 05 03	R5	M	Weighed	Onsite of generati	Marrkesh Ltd,W0048-01	Kilmurry South Landfill,Kilmacanogue,Bray, Co. Wicklow,Ireland		
Within the Country	19 12 02	No	86.24	ferrous metal	R4	M	Weighed	Offsite in Ireland	Multimetals,WFP-WW-13-0014-04	Bollarney,The Murrough,Wicklow Town,0,ireland		
Within the Country	20 03 01	No	73.34	mixed municipal waste	D15	M	Weighed	Offsite in Ireland	Starrus Eco Holdings - Starrus Eco Holdings Ltd - Bray MRF W0053-03	Fassaroe,Bray,Co Wicklow,.,ireland		
Within the Country	17 05 04	No	1800.0	soil and stones other than those mentioned in 17 05 03	R5	E	Volume Calculation	Offsite in Ireland	Marrakesh Ltd,WFP-WW-14-0010-02	Kilmurray,Kilmacanogue,Bray,Co. Wicklow,Ireland		
Within the Country	15 02 02	Yes	0.12	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances	D9	M	Volume Calculation	Offsite in Ireland	Atlas Environmental Ireland Limited,W0145-02	Raffeen Industrial Estate Raffeen Monkstown,Unit 9,Cork,T12 TW44,Ireland	Atlas Environmental Ireland Ltd,W0145-02,Raffeen Industrial Estate Raffeen Monkstown,Unit 9 ,Cork,T12 TW44,Ireland	Raffeen Industrial Estate Raffeen Monkstown,Unit 9 ,Cork,T12 TW44,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

Please enter details below then c

Name of Recoverer / Disposer / Next Destination Facility
Licence / Permit No. of Recoverer / Disposer / Next Destination Facility
Address of Recoverer / Disposer
Address 1 / Street name
Address 2 / Building number
Address 3 / City name
Address 4 / Postcode
Country

Alternatively, please select from

Name and License / Permit No.
Various off-site reuse in constructio
Various off-site reuse in constructio
Multimetals,WFP-WW-13-0014-04
Starrus Eco Holdings - Starrus Eco
Marrakesh Ltd,WFP-WW-14-0010
Atlas Environmental Ireland Limited
Marrkesh Ltd,W0048-01

:lick the OK button

Marrkesh Ltd
W0048-01
/ Next Destination Facility
Kilmurry South Landfill
Kilmacanogue
Bray
Co. Wicklow
Ireland

Please enter a full stop
field if there is no data

previously entered details by clicking on the row below then click OK

Address of Recoverer / Disposer / Broker

.,.,.,.,Ireland
.,.,.,.,Ireland
Bollarney,The Murrough,Wicklow Town,0,ireland
Fassaroe,Bray,Co Wicklow,.,ireland
Kilmurray,Kilmacanogue,Bray,Co. Wicklow,Ireland
Raffeen Industrial Estate Raffeen Monkstown,Unit 9,Cork,T12 TW44,Ireland
Kilmurry South Landfill,Kilmacanogue,Bray,Co. Wicklow,Ireland

Please enter details below then cli

Name of Final Recoverer / Disposer
License / Permit No. of Final Recoverer / Disposer
Address of Final Recoverer / Dispo
Address 1 / Street name
Address 2 / Building number
Address 3 / City name
Address 4 / Postcode
Country
Address of Actual Recovery / Disp
Address 1 / Street name
Address 2 / Building number
Address 3 / City name
Address 4 / Postcode
Country

Alternatively, please select from p

Name and License / Permit No.

Atlas Environmental Ireland Ltd,W01

ck the OK button

Atlas Environmental Ireland Ltd
W0145-02
oser
Raffeen Industrial Estate Raffeen Monkstown
Unit 9
Cork
T12 TW44
Ireland
osal Site
Raffeen Industrial Estate Raffeen Monkstown
Unit 9
Cork
T12 TW44
Ireland

reviously entered details by clicking on the row below then clic

Address of Final Recoverer / Disposer
Raffeen Industrial Estate Raffeen Monkstown,Unit 9 ,Cork,T12 TW

Please enter a full stop "." in an address field if there is no data to be entered

k OK

Address of Actual Recovery / Disposal Site

Raffeen Industrial Estate Raffeen Monkstown,Unit 9 ,Cork,T12 TW44,Ireland

Previous years data is correct as at 20/02/2018 09:40

Release_To	Year	Pollutant_Number	Pollutant_Description	M_C_E	Method_Code

Method_Description	Total

Previous years data is correct as at 20/02/2018 09:40

Year	Destination	EWC	Hazardous	Total
2016	Within the Country	17 01 01	N	24225.1
2016	Within the Country	17 03 02	N	5449.1
2016	Within the Country	17 05 04	N	21272.8
2016	Within the Country	19 12 02	N	100
2016	Within the Country	20 03 01	N	4.2

Description	TreatmentOperation
concrete	R5
bituminous mixtures containing other than those mentioned in 17 03 01	R5
soil and stones other than those mentioned in 17 05 03	R5
ferrous metal	R4
mixed municipal waste	D15

M_C_E	MethodCode	TreatmentLocation
M	Weighed	Offsite in Ireland
M	Weighed	Offsite in Ireland
M	Weighed	Offsite in Ireland
M	Weighed	Offsite in Ireland
M	Weighed	Offsite in Ireland

Name_Licence_Permit_No
Various off-site reuse in construction-related activities,Not Applicable
Various off-site reuse in construction-related activities,Not applicable
Various off-site reuse in construction-related activities,Not applicable
Multimetals,WFP-WW-13-0014-04
Starrus Eco Holdings - Starrus Eco Holdings Ltd - Bray MRF W0053-03

Address	Final_Recoverer_Disposer
.,.,.,.,Ireland	
.,.,.,.,Ireland	
.,.,.,.,Ireland	
Bollarney,The Murrough,Wicklow Town,0,ireland	
Fassaroe,Bray,Co Wicklow,.,ireland	

Actual_Address_Final_Destination

Previous years data is correct as at 20/02/2018 09:40

Type of Waste	Previous Year Total
Hazardous Waste inside the country for disposal	0
Hazardous Waste inside the country for recovery	0
Hazardous Waste outside the country for disposal	0
Hazardous Waste outside the country for recovery	0
Non-Hazardous Waste for disposal	4.2
Non-Hazardous Waste for recovery	51047

Current Year Total	Percentage Change
0.12	100
0	0
0	0
0	0
73.34	1646.190476
37331.13	-26.86910102