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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

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

click to access relevant guidance documents for this section

ol have an associated footnote or instructions

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

Facility Information	Summary	
AER Reporting Year	2012	
Licence Register Number	W0068-03	
Name of site		Youghal Landfill
Site Location		oxhole, Youghal, co.Cork
NACE Code		3821
Class/Classes of Activity		5(c), 5(d), 50.1
National Grid Reference (6E, 6 N)		2100E 0800N

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.

Youghal landfill accepted waste at the facility until February 2012. Since that date only cover material (soil and stones) and road building material (suitable C&D material) has been accepted to allow for a "pre-capping" profile to be constructed on Cell 9. This work is continuing into 2013 and a void of 200m3 is still available whenever the management of the facility decide to fill it. A capping design is currently being investigated. The environmental performance of the facility has continued to improve in comparison with previous years. The number of odour complaints plummeted from 76 in 2011 to 4 in 2012. The gas extraction system has continued to perform well with 2 enclosed flares burning off the gas generated. The daily attendance and well leachate removal has ensured increased effective length of the gas wells and, hence, the proper functioning of the system. Minor exceedences have again been measured in the perimeter gas wells but are explained by the estuarine conditions that account for naturally occuring CO2. Both Leachate and groundwater results are similar to previous years. The noise survey was compliant for the year as would be expected with the removal of the large landfill compacting plant from the site. Overall the site has been compliant with its Licence.

## **Declaration:**

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

Of the information is assured to meet licence requiremen

\_\_\_\_\_\_26/3/2013\_\_\_\_\_\_

Date

Group/Facility manager

(or nominated, suitably qualified and experienced deputy)

	Aik-summary template	LIC NO:	WUU68-U3	Year	2012
	Answer all questions and complete all tables where relevant				
1	Does your site have licensed air emissions? If yes please complete table A1 and A2 below for the current reporting year and answer further questions. If you do not have licenced emissions and do not complete a solvent management plan (table A4 and A5) you do not need to complete the tables	Yes		Additional information	
	Periodic/Non-Continuous Monitoring				
2	Are there any results in breach of licence requirements? If yes please provide brief details in the comment section of TableA1 below	No			
3	Was all monitoring carried out in accordance with EPA guidance note AG2 and using the basic air monitoring checklist?  Basic air monitoring monitoring checklist?  AGN2	Yes			

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

					1		1	1		
Emission		Frequency of	ELV in licence or any revision			Unit of	Compliant with		Annual mass	Comments -reason for change in % mass load from previous year if
reference no:	Parameter/ Substance		therof	Licence Compliance criteria	Measured value	measurement	licence limit	Method of analysis	load (kg)	applicable
reference no.			uicioi		1093405		neerice iiiiiie	Weeting of analysis	roud (Ng)	аррисавие
					1093403					
										More CH4 burned off on site than
										estimated in Gas Model. Nominal
										weight of 25kg returned to ensure
Flare Stack	Methane (CH4)	Continuous	N/A	SELECT		m3	ves	MAB	25	field populated
Tidi e Stack	iviculanc (on i)	continuous	,,,	522201	1759370		763	11111111		печа роранисса
					1700070					
										Annual mass load refers to difference
										between measured burn-off and
Flare Stack	Carbon dioxide (CO2)	Continuous	N/A	SELECT		m3	yes	ISO 12039:2001	119551	estimate Gas Model value.
					10.41					
				No 30min mean can exceed						
Flare Stack	Carbon monoxide (CO)	Continuous	<50mg/Nm3	the ELV		mg/Nm3	yes	ISO 12039:2001	37.9	
					14.85					
	Nitrogen oxides			No 30min mean can exceed						
Flare Stack	(NOx/NO2)	Annual	<150mg/Nm3	the ELV		mg/Nm3	yes	EN 14792:2005	54	
	Sulphur oxides				842					
E. S. I		l				/h. 2		511 4 4 TO 4 DOOF		
Flare Stack	(SOx/SO2)	Annual	N/A			mg/Nm3	yes	EN 14791:2005	791.3	
				No 30min mean can exceed						
	SELECT			the ELV		SELECT	SELECT	SELECT		
								-		
1	SELECT	I	1	SELECT	1	SELECT	SELECT	SELECT		1

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

AIR-summary template	Lic No:	W0068-03	Year	2012
Continuous Monitoring				
4 Does your site carry out continuous air emissions monitoring?	Yes			
If yes please review your continuous monitoring data and report the required fields below in Table 3 and compare it to its relevant Emission Limit Value (ELV)				
5 Did continuous monitoring equipment experience downtime? If yes please record downtime in table 3 below	Yes			
Do you have a proactive service agreement for each piece of continuous monitoring equipment?  Did your site experience any abatement system bypasses? If yes please detail them in table 4 below  Table A2: Summary of average emissions -continuous monitoring	Yes No			

Emission	Parameter/ Substance		Averaging	Compliance Criteria	Units of	Annual Emission	Annual maximum	Monitoring	Number of ELV	Comments
reference no:			Period		measurement			Equipment	exceedences in	
		ELV in licence or						downtime (hours)	current	
		any revision							reporting year	
		therof								
		N/A	12 month					279.5	0	Have recorded the combined annual
										downtime of both Flares at Youghal
										Landfill in this section. The emissions
										totals have been submitted in the
Flare Stack	PRTR			100 % of values < ELV	m3					above table.
	SELECT				SELECT					
	SELECT				SELECT					
	SELECT				SELECT					
	SELECT				SELECT					

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

Table A2. Abatement	system bypass reporting t	able Bypass protocol

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

<sup>\*</sup> this should include all dates that an abatement system bypass occurred

<sup>\*\*</sup> 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-summar	y template				Lic No:	W0068-03		Year	2012		
Solven	t use and managemen	t on site									
Do you have a to	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										
	ole A4: Solvent Management Plan Summary al VOC Emission limit value  Solvent regulations Please refer to linked solven complete table 5										
Reporting year	Total solvent input on site (kg)	Total VOC emissions to Air from entire site		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	Solvents lost in water (kg)	Collected waste solvent (kg)	Fugitive Organic Solvent (kg)	Solvent released in other ways e.g. by-	Solvents destroyed onsite through	Total emission of Solvent to air (kg)			
							Total				

2012

	AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)		Lic No:	W0068-03
				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 surface water analysis and visual inspections	No		
2	Was it a requirement of your licence to carry out visual inspections on any surface water discharges or watercourses on or near your site? If yes please complete table W2 below summarising only any evidence of contamination noted during visual inspections	No		

## Table W1 Surface water monitoring

		ter monitoring								
Location reference	Location relative to site activities	PRTR Parameter	Licenced Parameter	Monitoring date	ELV or trigger level in licence or any revision thereof*	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Comments
SW1			-11	Quarterly	No ELV or trigger levels		7.46			Median Vaulue for 2012
SW1	upstream upstream		pH Temperature	Quarterly	No ELV or trigger levels	N/A N/A	11.85	pH units degrees C	yes yes	Median Vaulue for 2012
5W1	upstream		Conductivity	Quarterly	No ELV or trigger levels	N/A N/A	2,360	μS/cm@25oC	yes	Median vaule for 2012.
SW1	upstream		Dissolved Oxygen	Quarterly	No ELV or trigger levels	N/A	9.26	mg/L	yes	Median Vaulue for 2012
SW1	upstream	Chlorides (as CI)		Quarterly	No ELV or trigger levels	N/A	2017.5	mg/L	yes	Median vaule for 2012.
SW1	upstream		BOD	Quarterly	No ELV or trigger levels	N/A	1.8	mg/L	yes	Median Vaulue for 2012
SW1	upstream		COD	Quarterly	No ELV or trigger levels	N/A	23	mg/L	yes	Median Vaulue for 2012
SW1	upstream		Ammonia (as N)	Quarterly	No ELV or trigger levels	N/A	0.21	mg/L	yes	Median Vaulue for 2012
SW1	upstream		Suspended Solids	Quarterly	No ELV or trigger levels	N/A	35	mg/L	yes	Median vaule for 2012
SW1	upstream	Chromium and compounds (as Cr)		Annual	No ELV or trigger levels	N/A	<0.1	μg/L	yes	Annual result
SW1	upstream	Copper and compounds (as Cu)		Annual	No ELV or trigger levels	N/A	0.006	mg/L	yes	Annual result
SW1	upstream	Cadmium and compounds (as Cd)		Annual	No ELV or trigger levels	N/A	0.4	μg/L	yes	Annual result
SW1 SW1	upstream		Iron	Annual	No ELV or trigger levels	N/A	272.5	μg/L	yes	Annual result
SW1	upstream	Lead and compounds (as Pb)	Manageria	Annual	No ELV or trigger levels	N/A	0.7	μg/L	yes	Annual result
SW1	upstream upstream		Magnesium Manganese (as Mn)	Annual Annual	No ELV or trigger levels No ELV or trigger levels	N/A N/A	20.7 74.8	mg/L	yes	Annual result Annual result
SW1	upstream	Mercury and compounds (as Hg)	···aligaliese (as WIII)	Annual	No ELV or trigger levels	N/A N/A	0.04	μg/L μg/L	yes yes	Annual result
SW1	upstream		Potassium	Annual	No ELV or trigger levels	N/A N/A	8.8	μg/L mg/L	yes	Annual result
SW1	upstream		Sulphate	Annual	No ELV or trigger levels	N/A	40.7	mg/L	yes	Annual result
SW1	upstream		(TON)	Annual	No ELV or trigger levels	N/A	3.089	mg/L	yes	Annual result
SW1	upstream	Zinc and compounds (as Zn)		Annual	No ELV or trigger levels	N/A	23.1	μg/L	yes	Annual result
SW1	upstream	Total phosphorus		Annual	No ELV or trigger levels	N/A	0.15	mg/L	yes	Annual result
SW2	downstream		pH	Quarterly	No ELV or trigger levels	N/A	7.44	pH units	yes	Median Vaulue for 2012
SW2	downstream		Temperature	Quarterly	No ELV or trigger levels	N/A	12.3	degrees C	yes	Median Vaulue for 2012
SW2	downstream		Conductivity	Quarterly	No ELV or trigger levels	N/A	1,625	μS/cm@25oC	yes	Median Vaulue for 2012.
SW2	downstream		Dissolved Oxygen	Quarterly	No ELV or trigger levels	N/A	9.12	mg/L	yes	Median Vaulue for 2012
SW2	downstream	Chlorides (as CI)		Quarterly	No ELV or trigger levels	N/A	5674	mg/L	yes	Median Vaulue for 2012.
SW2	downstream		BOD	Quarterly	No ELV or trigger levels	N/A	4.4	mg/L	yes	Median Vaulue for 2012
SW2 SW2	downstream		COD Ammonia (as N)	Quarterly	No ELV or trigger levels	N/A	282.5	mg/L	yes	Median Vaulue for 2012
SW2	downstream		Suspended Solids	Quarterly Quarterly			1.18 102.5	mg/L	yes	Median Vaulue for 2012 Median Vaulue for 2012
SW2	downstream	Chromium and compounds (as Cr)	Suspended Solids	Annual	No ELV or trigger levels	N/A	3.7	mg/L μg/L	yes yes	Annual result for 2012
SW2	downstream	Copper and compounds (as Cu)		Annual	No ELV or trigger levels	N/A	0.021	μg/L mg/L	yes	Median Vaulue for 2012
SW2	downstream	Cadmium and compounds (as Cd)		Annual	No ELV or trigger levels	N/A	0.2	μg/L	yes	Median Vaulue for 2012
SW2	downstream		Iron	Annual	No ELV or trigger levels	N/A	633.8	μg/L	yes	Annual result for 2012
SW2	downstream	Lead and compounds (as Pb)		Annual	No ELV or trigger levels	N/A	0.3	μg/L	yes	Median Vaulue for 2012
SW2	downstream		Magnesium	Annual	No ELV or trigger levels	N/A	174.4	mg/L	yes	Median Vaulue for 2012. EQS for SW is 50mg/l. Elevated levels are consistent with previous years and is due to geology of the site.
SW2				Annual	No ELV or trigger levels		1016.1			Annual result for 2012
SW2	downstream	Mercury and compounds (as Hg)	Manganese (as Mn)	Annual	No ELV or trigger levels	N/A	0.05	μg/L	yes	Median Vaulue for 2012
SW2	downstream	mercury and compounds (as fig)	Potassium	Annual	No ELV or trigger levels	N/A N/A	59.1	μg/L mg/L	yes	Median Vaulue for 2012
SW2	downstream		Sulphate	Annual	No ELV or trigger levels	N/A	359.4	mg/L	yes	Annual result for 2012
SW2	downstream		Total Oxidised Nitrogen (TON)	Annual	No ELV or trigger levels	N/A	<0.138	mg/L	yes	Median Vaulue for 2012
SW2	downstream	Zinc and compounds (as Zn)		Annual	No ELV or trigger levels	N/A	13.3	μg/L	yes	Median Vaulue for 2012
sw2	downstream	Total phosphorus		Annual	No ELV or trigger levels	N/A	0.25	mg/L	yes	Annual result for 2012
SW3	downstream		PH	Quarterly	No ELV or trigger levels	N/A	7.89	pH units	yes	Median vaule for 2012
SW3	downstream		Temperature	Quarterly	No ELV or trigger levels  No ELV or trigger levels	N/A	12 4190	degrees C	yes	Median vaule for 2012  Median vaule for 2012
	downstream		Conductivity	Quarterly	r. or unpper severs	N/A	4100	μS/cm@25oC	yes	

Lit ivioiiitoi	ing returns su	ımmary template-WA	TER/WASTEWA	ATER(SEWER)		Lic No:	W0068-03		Year	
SW3	downstream		Dissolved Oxygen	Quarterly	No ELV or trigger levels	N/A	10.43	mg/L	yes	Median vaule
SW3	downstream	Chlorides (as CI)		Quarterly	No ELV or trigger levels	N/A	7889	mg/L	yes	Median vaule
SW3	downstream		BOD	Quarterly	No ELV or trigger levels	N/A	4.8	mg/L	yes	Median vaule
SW3			COD	Quarterly	No ELV or trigger levels	N/A	519	mg/L		Median vaule
SW3	downstream			Quarterly	No ELV or trigger levels		3.44		yes	Median vaule
SW3	downstream		Ammonia (as N)	Quarterly	No ELV or trigger levels	N/A	137	mg/L	yes	Median vaule
SW3	downstream		Suspended Solids			N/A	26.4	mg/L	yes	Median vaule
	downstream	Chromium and compounds (as Cr)		Annual	No ELV or trigger levels	N/A		μg/L	yes	
SW3	downstream	Copper and compounds (as Cu)		Annual	No ELV or trigger levels	N/A	0.177	mg/L	yes	Annual result
SW3	downstream	Cadmium and compounds (as Cd)		Annual	No ELV or trigger levels	N/A	0.2	μg/L	yes	Annual result
sw3	downstream		Iron	Annual	No ELV or trigger levels	N/A	45.1	μg/L	yes	Annual result
sw3	downstream	Lead and compounds (as Pb)		Annual	No ELV or trigger levels	N/A	<0.3	μg/L	yes	Annual result
sw3	downstream		Magnesium	Annual	No ELV or trigger levels	N/A	1100.7	mg/L	yes	Annual result EQS limit mg/l.Elevated consistent with years and are geology of t
sw3	downstream		Manganese (as Mn)	Annual	No ELV or trigger levels	N/A	6.4	μg/L	yes	Annual result
sw3	downstream	Mercury and compounds (as Hg)		Annual	No ELV or trigger levels	N/A	0.14	μg/L	yes	Annual result
sw3	downstream		Potassium	Annual	No ELV or trigger levels	N/A	344 3	mg/L	ves	Annual result
sw3	downstream		Sulphate	Annual	No ELV or trigger levels	N/A	359.8	mg/L	ves	Annual result
sw3			Total Oxidised Nitrogen	Annual	No ELV or trigger levels	,			1	Annual result
sw3	downstream		(TON)	annual	No ELV or trigger levels	N/A	<0.138 8.6	mg/L	yes	Annual result
sw3	downstream	Zinc and compounds (as Zn)		Annual	No ELV or trigger levels	N/A		μg/L	yes	Annual result
SW6	downstream	Total phosphorus		Quarterly	No ELV or trigger levels	N/A	0.02	mg/L	yes	Median vaule
	downstream		PH			N/A	7.5	pH units	yes	Median vaule
SW6	downstream		Temperature	Quarterly	No ELV or trigger levels	N/A	12.25	degrees C	yes	
SW6	downstream		Conductivity	Quarterly	No ELV or trigger levels	N/A	1650	μS/cm@25oC	yes	Median vaule
SW6	downstream		Dissolved Oxygen	Quarterly	No ELV or trigger levels	N/A	9.79	mg/L	yes	Median vaule Median vaule
SW6	downstream	Chlorides (as CI)		Quarterly	No ELV or trigger levels	N/A	6197	mg/L	yes	Tidal infu
SW6	downstream		BOD	Quarterly	No ELV or trigger levels	N/A	5.95	mg/L	yes	Median vaule
SW6	downstream		COD	Quarterly	No ELV or trigger levels	N/A	307	mg/L	yes	Median vaule
SW6	downstream		Ammonia (as N)	Quarterly	No ELV or trigger levels	N/A	1.67	mg/L	yes	Median vaule
SW6	downstream		Suspended Solids	Quarterly	No ELV or trigger levels	N/A	64	mg/L	yes	Median vaule
SW6	downstream	Chromium and compounds (as Cr)		Annual	No ELV or trigger levels	N/A	4.3	μg/L	yes	Median vaule
SW6	downstream	Copper and compounds (as Cu)		Annual	No ELV or trigger levels	N/A	0.027	mg/L	ves	Annual result
SW6	downstream	Cadmium and compounds (as Cd)		Annual	No ELV or trigger levels	N/A	0.2	μg/L	yes	Annual result
SW6		Caumum and compounds (as cu)	Iron	Annual	No ELV or trigger levels	N/A	449.8		yes	Annual result
SW6	downstream	Lood and community (or Dh)		Annual	No ELV or trigger levels	.,,,,		μg/L	100	Annual result
SW6	downstream	Lead and compounds (as Pb)	Magnesium	Annual	No ELV or trigger levels	N/A	0.4	μg/L mg/L	yes	Annual res 2012.EQS I 50mg/l. Elevat is consistent a the geology of
SW6	downstream			Annual	No ELV or trigger levels					Annual result
SW6	downstream		Manganese (as Mn)	Annual	No ELV or trigger levels	N/A	950.7	μg/L	yes	Annual result
SW6	downstream	Mercury and compounds (as Hg)	Potassium	Annual	No ELV or trigger levels	N/A	0.04	μg/L	yes	Annual result
SW6	downstream			Annual	No ELV or trigger levels	N/A	65.8	mg/L	yes	Annual result
	downstream		Sulphate Total Oxidised Nitrogen			N/A	415.9	mg/L	yes	
SW6	downstream		(TON)	Annual	No ELV or trigger levels	N/A	<0.138	mg/L	yes	Annual result
SW6	downstream	Zinc and compounds (as Zn)		Annual	No ELV or trigger levels	N/A	28.5	μg/L	yes	Annual result
SW6	downstream	Total phosphorus		Annual	No ELV or trigger levels	N/A	1.93	mg/L	yes	Annual result
GA127	onsite		рН	Quarterly	No ELV or trigger levels	N/A	7.45	pH units	yes	Median vaule
GA127	onsite		Temperature	Quarterly	No ELV or trigger levels	N/A	11.85	degrees C	yes	Median vaule
GA127	onsite		Conductivity	Quarterly	No ELV or trigger levels	N/A	1180	μS/cm@25oC	yes	Median vaule

AER Monitor	ing returns su	mmary template-W	ATER/WASTEWA	ATER(SEWER)		Lic No:	W0068-03		Year	2012
GA127	onsite	Chlorides (as Cl)		Quarterly	No ELV or trigger levels	N/A	188	mg/L	yes	Median vaule for 2012
GA127	onsite		BOD	Quarterly	No ELV or trigger levels	N/A	6.65	mg/L	yes	Median vaule for 2012
GA127	onsite		COD	Quarterly	No ELV or trigger levels	N/A	24	mg/L	yes	Median vaule for 2012
GA127	onsite		Ammonia (as N)	Quarterly	No ELV or trigger levels	N/A	6.15	mg/L	yes	Median vaule for 2012. This site is very ove grown and prone to algae growth
GA127	onsite		Suspended Solids	Quarterly	No ELV or trigger levels	N/A	66	mg/L	yes	Median vaule for 2012
GA127	onsite	Chromium and compounds (as Cr)		Annual	No ELV or trigger levels	N/A	3.9	mg/L	yes	Annual result for 2012
GA127	onsite	Copper and compounds (as Cu)		Annual	No ELV or trigger levels	N/A	0.01	μg/L	yes	Annual result for 2012
GA127	onsite	Cadmium and compounds (as Cd)		Annual	No ELV or trigger levels	N/A	0.4	mg/L	yes	Annual result for 2012
GA127	onsite		Iron	Annual	No ELV or trigger levels	N/A	8332.7	μg/L	yes	Annual result for 2012.Iron levels are elevated this is a common occurance.
GA127	onsite	Lead and compounds (as Pb)		Annual	No ELV or trigger levels	N/A	10.7	μg/L	yes	Annual result for 2012
GA127	onsite		Magnesium	Annual	No ELV or trigger levels	N/A	17.8	mg/L	yes	Annual result for 2012.Elevated levels above EQS 50mg/l are due to the geology of the site.
GA127	onsite		Manganese (as Mn)	Annual	No ELV or trigger levels	N/A	646.4	μg/L	yes	Annual result for 2012
GA127	onsite	Mercury and compounds (as Hg)		Annual	No ELV or trigger levels	N/A	0.04	μg/L	yes	Annual result for 2012
GA127	onsite		Potassium	Annual	No ELV or trigger levels	N/A	17.6	μg/L	yes	Annual result for 2012
GA127	onsite		Sulphate	Annual	No ELV or trigger levels	N/A	37.9	mg/L	yes	Annual result for 2012
GA127	onsite		Total Oxidised Nitrogen (TON)	Annual	No ELV or trigger levels	N/A	1.333	mg/L	yes	Annual result for 2012
GA127	onsite	Zinc and compounds (as Zn)		Annual	No ELV or trigger levels	N/A	21.6	μg/L	yes	Annual result for 2012
GA127	onsite	Total phosphorus		Annual	No ELV or trigger levels	N/A	0.68	mg/L	ves	Annual result for 2012

\*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)

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

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

Emission reference no:	Emission released to	Parameter/ SubstanceNote 1	Type of sample	Frequency of monitoring		ELV or trigger values in licence or any revision therof <sup>Note 2</sup>		Measured value		Compliant with licence	Method of analysis	Procedural	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 M	onitorin	ng returns su	mmary template-W	ATER/WASTEW/	ATER(SEWER)		Lic No:	W0068-03		Year	2012	
		onitoring ry out continuou	us emissions to water/sewe	er monitoring?		SELECT		Additional Information		]		
		narise your cont on Limit Value (E	tinuous monitoring data be ELV)	elow in Table W4 an	d compare it to							
6 table W4	1 below		nent experience downtime			SELECT						
site? Did abate			ntract for each piece of co ur during the reporting yea	_	elete table W5	SELECT				]		
Table V	W4: Sum	nmary of ave	erage emissions -con	tinuous monito		SELECT	I					
				ELV or trigger					% change +/- from	Maritantan	N b f Fl.V	
Emission		mission			Averaging			Annual Emission for current	year	Equipment	Number of ELV exceedences in	
reference	e no: re	eleased to	Parameter/ Substance	thereof	Period	Criteria	measurement	reporting year (kg)		downtime (hours)	reporting year	Comments

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

SELECT

SELECT

SELECT

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?	
						SELECT	

SELECT SELECT

SELECT

SELECT

SELECT

SELECT

<sup>\*</sup>Measures taken or proposed to reduce or limit bypass frequency

und/Containment tructure ID Type eachate Lagoon reinforced concrete SEEECT Capacity required should comply with \$25 % or 110% containment in	rground pipelines (including storm in the required test schedule? chedule? ed with the required test schedule tithin the test schedule?	ainment structures ? If yes p test-all bunding structures w mwater and foul), Tanks, sum ule?	which failed including mobile	e bunds must be listed in	Yes 3 years	Additional information  Only one bund test is required at the site for the leachate lagoon. The lagoon is used for storage of leachate prior to transport to local WWTP. Last test was completed in 2008 before a floating cover was installed on the lagoon to stop rainwater ingress. Due to this cover it has not been possible to get an assessment completed without damaging the cover integrity and incurring significant costs.						
elease provide integrity testing frequency period beet able below  elease provide integrity testing frequency period boes the site maintain a register of bunds, under gree units and mobile bunds) ow many bunds are on site?  ow many bunds are on site?  ow many of these bunds have been tested witin ow many mobile bunds are on site?  re the mobile bunds are instead to the bund test so ow many of these mobile bunds have been test ow many sumps on site are included in the bund test so ow many of these mobile bunds in site integrow many of these sumps are integrity tested wit lease list any sump integrity failures in table B1 or all sumps and chambers have high level liquid yes to Q11 are these failsafe systems included in Table B1: Summary details of the sum of the	reground pipelines (including storm in the required test schedule? chedule? ed with the required test schedul grity test schedule? thin the test schedule? lalarms? in a maintenance and testing prog bund /containment structure inte	test- <b>all bunding structures w</b> mwater and foul), Tanks, sum ule? gramme? egrity test	which failed including mobile	e bunds must be listed in	Yes 3 years No No No No	for the leachate lagoon. The lagoon is used for storage of leachate prior to transport to local WUYFL Last test was completed in 2008 before a floating cover was installed on the lagoon to stop rainwater ingress. Due to this cover it has not been possible to get an assessment completed without damaging the cover integrity and						
Joses the site maintain a register of bunds, undergipe units and mobile bunds) ow many bunds are on site? ow many of these bunds have been tested witin ow many of these bunds have been tested witin ow many of these bunds are on site? re the mobile bunds are on site? re the mobile bunds and the bunds have been teste ow many of these mobile bunds have been teste ow many of these sumps are integrity tested wit lease list any sump integrity failures in table B1: o all sumps and chambers have high level liquid yes to Q11 are these failsafe systems included in  Table B1: Summary details of b  Table B1: Summary details of b  und/Containment ructure ID  Type seachate Lagoon reinforced concrete seachate Lagoon reinforced concrete	rground pipelines (including storm  n the required test schedule?  chedule? ed witin the required test schedul grity test schedule? thin the test schedule? thin the test schedule? alarms? in a maintenance and testing prog	gramme? egrity test		ners refers to "Chemstore"	No No No	incurring significant costs.						
und/Containment  Table B1: Summary details of b	rground pipelines (including storm  n the required test schedule?  chedule? ed witin the required test schedul grity test schedule? thin the test schedule? thin the test schedule? alarms? in a maintenance and testing prog	gramme? egrity test		ners refers to "Chemstore"	No No No	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
yoe units and mobile bunds) ow many bunds are on site? ow many of these bunds have been tested witin ow many mobile bunds are on site? re the mobile bunds included in the bund test so ow many of these mobile bunds have been teste ow many sumps on site are included in the integ ow many sumps on site are included in the integ ow many of these sumps are integrity tested wit lease list any sump integrity failures in table B1 o all sumps and chambers have high level liquid or yes to Q11 are these failsafe systems included in  Table B1: Summany details of the bund of the site of th	n the required test schedule?  chedule?  ed with the required test schedul grity test schedule?  thin the test schedule?  lalarms? in a maintenance and testing prog  bund /containment structure inte	gramme? egrity test		ies sees of Chemistre	No No N/A	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
ow many bunds are on site? ow many of these bunds have been tested witin ow many mobile bunds are on site? re the mobile bunds included in the bund test so ow many of these mobile bunds have been test ow many sumps on site are included in the integ ow many of these sumps are integrity tested wit lease list any sump integrity failures in table \$1 o all sumps and chambers have high level liquid a yes to Q11 are these failsafe systems included in  Table \$1: Summany details of the  "Table B1: Summany details of the sum of the system of the sum of the system of	chedule? ed witin the required test schedul grity test schedule? thin the test schedule? lalarms? in a maintenance and testing prog bund /containment structure inte	gramme? egrity test			No No No	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
ow many mobile bunds are on site? re the mobile bunds included in the bund test sc ow many of these mobile bunds have been teste ow many of these mobile bunds have been teste ow many of these sumps are included in the integ ow many of these sumps are integrity tested wit lease list any sump integrity failures in table B1 o all sumps and chambers have high level liquid of yes to Q11 are these failsafe systems included in  Table B1: Summary details of the state of the summary details of the summary det	chedule? ed witin the required test schedul grity test schedule? thin the test schedule? lalarms? in a maintenance and testing prog bund /containment structure inte	gramme? egrity test			N/A	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
re the mobile bunds included in the bund test so ow many of these mobile bunds have been teste ow many sumps on site are included in the integ ow many of these sumps are integrity tested wit lease list any sump integrity failures in table 11 o all sumps and chambers have high level liquid yes to Q11 are these failsafe systems included in   Table B1: Summary details of b  Table B1: Summary details of b  und/Containment ructure iii  Type acchate Lagoon reinforced concrete sechate Lagoon reinforced concrete Sections (Capacity required should comply with SCS or 110% containment rucquired should comply with SCSS or 110% containment rucquired should comply should comply with SCSS or 110% containment rucquired should comply should comply should comply sh	ed with the required test schedul grity test schedule? thin the test schedule? thin the test schedule? laid alarms? in a maintenance and testing prog bund /containment structure inte	gramme? egrity test			N/A	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
ow many of these mobile bunds have been teste ow many sumps on site are included in the integ ow many of these sumps are integrity tested wit lease list any sump integrity failures in table \$1 to all sumps and chambers have high level liquid a yes to Q11 are these failsafe systems included in the properties of the summary details of \$1.00 to \$	ed with the required test schedul grity test schedule? thin the test schedule? thin the test schedule? laid alarms? in a maintenance and testing prog bund /containment structure inte	gramme? egrity test			N/A	1 0 0						
ow many sumps on site are included in the integ ow many of these sumps are integrity tested wit lease list any sump integrity failures in table B1 o all sumps and chambers have high level liquid yes to Q11 are these failsafe systems included in   Table B1: Summary details of the summary details of	grity test schedule?  Ithin the test schedule?  I alarms?  In a maintenance and testing prog  bund /containment structure inte	gramme? egrity test			No		1					
lease list any sump integrity failures in table \$1 o all sumps and chambers have high level liquid a yes to Q11 are these failsafe systems included in the properties of \$1.50 Summary details of the properties of the proper	alarms? in a maintenance and testing prog bund /containment structure inte	egrity test			No							
o all sumps and chambers have high level liquid a yes to Q11 are these failsafe systems included in   Table B1: Summary details of b  und/Containment  Tructure ID  Type  acachate Lagoon reinforced concrete  Section (Supply with 25% or 110% containment  Capacity required should comply with 50 or 110% containment  Capacity required should comply with 50 or 110% containment  Type  Typ	alarms? in a maintenance and testing prog bund /containment structure inte	egrity test										
yes to Q11 are these failsafe systems included in  Table B1: Summary details of b  und/Containment tructure ID Type achate Lagoon reinforced concrete SEEEE. Capacity required should comply with 25% or 110% containment r	in a maintenance and testing prog bund /containment structure inte	egrity test										
und/Containment tructure ID Type eachate Lagoon reinforced concrete SEEECT Capacity required should comply with \$25 % or 110% containment in	Specify Other type											
und/Containment tructure ID Type eachate Lagoon reinforced concrete SEEECT Capacity required should comply with \$25 % or 110% containment in	Specify Other type											
tructure ID Type eachate Lagoon reinforced concrete SELECT Capacity required should comply with 25% or 110% containment re		Product containment										
SELECT Capacity required should comply with 25% or 110% containment ru	Liner covered concrete		Actual capacity	Capacity required*	Type of integrity test	Other test type	Test date			Integrity test failure explanation <50 words	Corrective action taken	Scheduled date for retest
Capacity required should comply with 25% or 110% containment ru		Leachate	2000 m3	1500 m3	Structural assessment SELECT				Pass SELECT		SELECT SELECT	
as integrity testing been carried out in accordance	rule as detailed in your licence			+	SELECT	Commentary		SELECT 3	SELECT		SELECT	4
	nce with licence requirements and	d are all structures tested in				,	Ī					
ne with BS8007/EPA Guidance? re channels/transfer systems to remote containn	ment customs tested?		bunding and storage guideli	lines	Yes SELECT	N/A	+					
are channels/transfer systems compliant in both i					SELECT	N/A	†					
	7						_					
Pipeline/underground structure testing re you required by your licence to undertake inte			t- 2 ifl fill				Т					
nderground structures and pipelines on site whice		ructures e.g. pipelines or sur	imps etc : ii yes piease iiii ou	ut table 2 below listing all	SELECT							
lease provide integrity testing frequency period					SELECT		İ					
Table B2: Summary details of nir	ipeline/underground structures in	ntegrity test	7									
Table Dai Salimary details of pi	parine, anderground acceptates in	,										
	Material of construction: SELECT	Does this structure have Secondary containment? SELECT	Type of secondary containment	Type integrity testing SELECT	Integrity reports maintained on site? SELECT	Results of test SELECT	Integrity test failure explanation <50 words	Corrective action Staken f	Scheduled date for retest	Results of retest(if in current reporting year) SELECT		
SELECT	JECCOT	SEECI	JEECT	SELECT	JEECU	SELECT				JEEC !	i i	
											4	
						7						

Groundwater/Soil monitoring template Lic No: W0068-03 Year 2012

- 1 Are you required to carry out groundwater monitoring as part of your licence requirements?
- 2 Are you required to carry out soil monitoring as part of your licence requirements?
- $^{\rm 3}$  Do you extract groundwater for use on site? If yes please specify use in comment section
- $^{\rm 4}$  Is there contaminated land and /or groundwater on site? If yes please answer q's 5-12
- Is the contamination related to operations at the facility (either current and/or historic)
- 6 Have actions been taken to address contamination issues?If yes please summarise remediation strategies proposed/undertaken for the site
- 7 Please specify the proposed time frame for the remediation strategy
- 8 Is there a licence condition to carry out/update ELRA for the site?
- 9 Has any type of risk assesment been carried out for the site?
- 10 Has a Conceptual Site Model been developed for the site?
- 11 Have potential receptors been identified on and off site?
- 12 Is there evidence that contamination is migrating offsite?

	Comments
yes	
no	
no	
no	
SELECT	
SELECT	

**Table 1: Upgradient Groundwater monitoring results** 

											Upward trend in
										% change in	pollutant
	Sample									average	concentration over last
Date of	location	Parameter/			Maximum	Average				concentration	5 years of monitoring
sampling	reference	Substance	Methodology	Monitoring frequency	Concentration++	Concentration+	unit	GTV's*	SELECT**	previous year +/-	data
Quarterly	MW4	рН	Meter	Quarterly	7.55	7.37	SELECT		9.5	0	no
Quarterly	MW4	Temp	Meter	Quarterly	15.1	13.05			25	0	no
Quarterly	MW4	Elec.Conductivity	Meter	Quarterly	5100	3150			1000	0	no
	MW4	Chlorides	titration	Quarterly	16894	8009	mg/l		250	1820%	no
		Ammoniacal	ias.		23	12.775					
Quarterly	MW4	Nitorgen		Quarterly	14584.3	6772 27	mg/l		80mg/I* (Trigger limit		no
	MW4	Iron		Quarterly		6772.27	ug/l			8.3%7	no
Quarterly	MW4	TON		Quarterly	<0.138	<0.138	ug/l		No abnormal change		no
Quarterly	MW4	TOC	HACH	Quarterly	45	28	mg/l		30mg/I (Tigger limit)	18%	no
Annual	MW4	Cadmium		Annual	0.2	0.2	ug/l		0.005	0	no
Annual	MW4	Chromium (total)		Annual	14.4	14.4	ug/l		0.03	0	no
Annual	MW4	Copper		Annual	0.004	0.004	ug/l		0.03	0	no
Annual	MW4	Cyanide (Total)		Annual	<10	<10	ug/I		0.01	0	no
Annual	MW4	Lead		Annual	<0.3	<0.3	ug/I		0.01	0	no
Annual	MW4	Mangnesium		Annual	31	31	mg/l		50	0	no
Annual	MW4	Manganese		Annual	1584.4	1584.4	ug/I		0.05	0	no
Annual	MW4	Mercury		Annual	0.04	0.04	ug/I		0.001	0	no
Annual	MW4	Nickle		Annual	1.7	1.7	ug/l		0.02	0	no
Annual	MW4	Potassium		Annual	22.2	22.2	mg/l		5	0	no
Annual	MW4	Sulphate		Annual	4.4	4.4	mg/l		200	0	no
Annual	MW4	Total Alkalinity		Annual	839.6	839.6	mg/l			0	no
					0.74	0.74					
Annual	MW4	Total Phosphorus		Annual	0.15	0.45	mg/l				no
Annual	MW4	Phenols		Annual	<0.15	<0.15	ug/I		0.5	0	no

Ground	water/Soil m	nonitoring template		Lic No:	W0068-03		Year	2012		
Annual	MW4	Acenaphthylene	Annual	<0.5	<0.5	ug/l			0	no
Annual	MW4	Anthracene	Annual	<0.5	<0.5	ug/l			0	no
Annual	MW4	Benzene	Annual	0.1	0.1	ug/I		1	0	no
		Bromodichlorometh		<2	<2					
Annual	MW4	ane	Annual			ug/I				no
Annual	MW4	Bromoform	Annual	<1	<1	ug/I				no
Annual	MW4	Chloroform	Annual	<1	<1	- 3		12		no
Annual	MW4	Chrysene	Annual	<1	<1	ug/l			0	no
Annual	MW4	Dibromochlorometh ane	Annual	<1	<1	ug/l			0	no
Annual	MW4	Fluoranthene	Annual	<1	<1					no
Annual	MW4	Fluorene	Annual	<1	<1	ug/l				no
Annual	MW4	Naphthalene	Annual	<2.0	<2.0					no
		Dibromochlorometh	Aimudi	<1	<1	-0/-				···
Annual	MW4	ane	Annual			ug/I			0	no
Annual	MW4	Pentachlorophenol	Annual	<1	<1	ug/l		2	0	no
Annual	MW4	Phenanthrene	Annual	<1	<1	ug/l		2		no
Annual	MW4	Pyrene	Annual	<1	<1	ug/l				no
Ailliuui	10100-4	Tyrene	Ailluai	<0.1	<0.1	45/1			Ů	110
Annual	MW4	Tetrachloroethene	Annual			ug/l			0	no
Annual	MW4	Trichloroethene	Annual	<0.1	<0.1	ug/l			0	no
Annual	MW4	Hexachlorobenzene	Annual	<1	<1	ug/l		0.03	0	no
Alliluai	101004	Hexachlorobutadien	Annual	<0.5	<0.5	ug/1		0.03	Ü	IIO .
Annual	MW4	e	Annual			ug/I		0.1	0	no
A		2,4,6-		<1	<1	/!				
Annual	MW4	Trichlorophenol	Annual	<1	<1	ug/I			0	no
Annual	MW4	2,4-Dichlorophenol	Annual	``	``	ug/I			0	no
				<1	<1					
Annual	MW4	2,4-Dimethylphenol	Annual	<1	<1	ug/I				no
Annual	MW4	2-Chlorophenol 1,2,4-	Annual	<0.5	<0.5	ug/I			0	no
Annual	MW4	trichlorobenzene	Annual	<b>V</b> 0.3	<b>V</b> 0.5	ug/I			0	no
		1,2-		<0.5	<0.5					
Annual	MW4	dichlorobenzene 1,3-	Annual	<0.5	<0.5	ug/I			0	no
Annual	MW4	dichlorobenzene	Annual	<b>V</b> 0.3	<b>V</b> 0.5	ug/l			0	no
		1,4-		<0.5	<0.5					
Annual	MW4	dichlorobenzene 2,4,5-	Annual	<1	<1	ug/I			0	no
Annual	MW4	Trichlorophenol	Annual	<1	<1	ug/I			0	no
				<1	<1					
Annual	MW4	2,4-Dinitrotoluene	Annual			ug/I			0	no
Annual	MW4	2,6-Dinitrotoluene	Annual	<1	<1	ug/I			0	no
				<1	<1	-				
Annual	MW4	2-				ii.				
Annual	MW4	Chloronaphthalene	Annual	<1	<1	ug/I			0	no
		2-								
Annual	MW4	Methylnaphthalene	Annual			ug/I			0	no
Annual	MW4	2-Methylphenol	Annual	<1	<1	5				no
Annual	MW4	2-Nitrophenol	Annual	<1	<1	ug/I			0	no
Annual	MW4	4-Bromophenyl Phenyl Ether	Annual	<1	<1	ug/l			n	no
		4-Chloro-3-	, amoun	<1	<1					
Annual	MW4	methylphenol	Annual			ug/I			0	no
Annual	MW4	4-Chlorophenyl phenyl ether	Annual	<1	<1	ug/l			٥	no
Aiiiidai		pricryi cuici	Aiiiludi	1	L	- M	<u> </u>		Ü	

Ground	dwater/Soil n	nonitoring template		Lic No:	W0068-03	Year	2012	
Annual	MW4	4-Nitrophenol	Annual	<5	<5 ug/I			0 no
Annual	MW4	Acenaphthene	Annual	<1				0 no
				<1	<1			
Annual	MW4	Benzo(a)anthracene	Annual		ug/l			0 no
Annual	MW4	Benzo(a)pyrene	Annual	<1	08/1			0 no
Annual	MW4	Benzo(b)fluoranthe ne	Annual	<1	<1 ug/l			0 no
		Benzo(g,h,i)perylen	, amadi	<1				
Annual	MW4	e	Annual		ug/I			0 no
Annual	MW4	Benzyl Butyl Phthalate	Annual	<1	<1 ug/l			0 no
Ailliuui	101004	Bis(2-	Annual	<1				0110
		chloroethoxy)metha						
Annual	MW4	ne	Annual		ug/l			0 no
		Bis(2-		<1	<1			
Annual	MW4	chloroethyl)ether	Annual		ug/l			0 no
		Bis(2-		<1	<1			
Annual	MW4	chloroisopropyl)eth	Annual		ug/l			0 no
Ailliuui	101004	Bis(2-	Allitudi	<5				0 110
		ethylhexyl)phthalat						
Annual	MW4	e Dibaaa/a bhaathaaa	Annual		ug/l			0 no
Annual	MW4	Dibenz(a,h)anthrace	Annual	<1	<1 ug/l			0 no
Annual	MW4	Dibenzofuran	Annual	<1				0 no
Annual	MW4	Diethylphthalate	Annual	<1				0 no
			Amida	<1				
Annual	MW4	di-n-Butylphthalate	Annual		ug/I			0 no
Annual	MW4	Di-n-octylphthalate	Annual	<1				0 no
Annual	MW4	Diphenylamine		<1	ug/I <1 ug/I			
Alliudi	101004	Diprienyiamine	Annual	<1	a <sub>6</sub> , ,			0 no
Annual	MW4	Hexachloroethane	Annual		ug/I			0 no
	MW4	Indeno(1,2,3-		<1				
Annual		c,d)pyrene	Annual	<1	ug/l			0 no
Annual	MW4	Isophorone	Annual	<0.5	-8/			0 no
Annual	MW4	Nitrobenzene n-Nitrosodi-n-	Annual	<1	a <sub>6</sub> /1			0 no
Annual	MW4	propylamine	Annual		ug/I			0 no
Annual	MW4	Acetone	Annual	<2	<2 ug/l			0 no
		1		<5	<5			
Annual	MW4	Dichloromethane	Annual	^-	ug/I			0 no
Annual	MW4	Tetrahydrofuran	Annual	<0.5	<0.5 ug/l			0 no
Annual	MW4	Toluene	Annual	<0.5	· 0		10	0 no
Annual	MW4	Xylene -o	Annual	0.6	. 0		10	0 no
Annual	MW4	Dichlorodifluoromet hane	Annual	<10	<10 ug/l			0 no
Annual	MW4	Chloromethane	Annual	<0.5	<0.5 ug/l			0 no
	1	Ethyl	* ************************************	<0.5				
Annu-1	h 43.474	Chloride/Chloroeth	[					
Annual	MW4	ane	Annual	<0.5	ug/l <0.5 ug/l			0 no
Annual	MW4	Vinyl Chloride	Annual	<0.5	- 0"			0 no
Annual	MW4	Bromomethane Trichloromonofluor	Annual	<0.5	<0.5 ug/l			0 no
Annual	MW4	omethane	Annual	<0.5	<0.5 ug/l			0 no
				<0.5	<0.5			
Appur	h 43.474	Ethyl Ether/Diethyl	<u>.</u> .					
Annual	MW4	Ether	Annual	<0.5	ug/I <0.5			0 no
Annual	MW4	11 Dichloroethene	Annual	<0.0	ug/I			0 no

Ground	water/Soil m	onitoring template		Lic No:	W0068-03		Year	2012		
		Iodomethane/Meth		<0.5	<0.5					
Annual	MW4	yl lodide	Annual			ug/I			0	no
Annual	MW4	Carbon Disulphide	Annual	<0.5	<0.5	ug/l			0	no
Annual	MW4	Allyl Chloride	Annual	<0.5	<0.5					no
rumaar		Chlormethyl	Alliudi	<0.5	<0.5	05/1				110
		Cyanide/Chloroacet								
Annual	MW4	onitrile	Annual	<10	<10	ug/I				no
Annual	MW4	Propanenitrile Trans-1,2	Annual	<0.5	<0.5	ug/l			0	no
Annual	MW4	Dichloroethene	Annual	<0.5	<0.5	ug/I			0	no
Annual	MW4	MtBE	Annual	<0.5	<0.5	ug/l			0	no
				<0.5	<0.5					
Annual	MW4	1,1-dichloroethane	Annual	.0.5	.0.5	ug/l		30	0	no
Annual	MW4	2,2- dichloropropane	Annual	<0.5	<0.5	ug/l			0	no
		cis-12		<0.5	<0.5	3				
Annual	MW4	Dichloroethene	Annual			ug/I			0	no
Annual	MW4	2-Butanone	Annual	<5	<5	08/1				no
Annual	MW4	Methyl Acrylate	Annual	<0.5	<0.5	ug/I			0	no
Annual	MW4	Bromochlorometha ne	Annual	<0.5	<0.5	ug/l			0	no
Allifoli	101004		Alliudi	<0.5	<0.5	ид/1				110
Annual	MW4	Methacrylonitrile	Annual			ug/l			0	no
Annual	MW4	1,1,1- trichloroethane	Ammuni	<0.5	<0.5	ug/l		500	0	no
Annual	MW4	1-Chlorobutane	Annual	<0.5	<0.5			500		no
Allilual	101004	Carbon	Annual	<0.5	<0.5	ug/1			0	110
Annual	MW4	Tetrachloride	Annual	40.0	<b>VO.</b> 0	ug/l			0	no
				<0.5	<0.5				_	
Annual	MW4	11 Dichloropropene	Annual	<0.1	<0.1	ug/l			0	no
Annual	MW4	1,2 dicloroethane	Annual	Q0.1	Q0.1	ug/l			0	no
		1,2-		<0.5	<0.5					
Annual	MW4	dichloropropane	Annual	0.5	0.5	ug/l			0	no
Annual	MW4	Dibromomethane	Annual	<0.5	<0.5	ug/l			0	no
		Methyl		<0.5	<0.5					
Annual	MW4	Methacrylate	Annual			ug/l			0	no
		13		<2	<2					
Annual	MW4	Dichloropropene,cis	Annual			ug/l			0	no
		MIBK/4 Methyl 2		<2	<2				_	
Annual	MW4	Pentanone 13	Annual	<2	<2	ug/l			0	no
		Dichloropropene,tra	1		~~					
Annual	MW4	ns	Annual			ug/l			0	no
Annual	MW4	Ethyl Methacrylate	Annual	<2	<2	ug/l			0	no
Alliudi	191994	Luiyi wediduyidte	Annual	<0.5	<0.5	ug/1			0	110
Annual	MW4	112 Trichloroethane	Annual	40.0		ug/I			0	no
		1,3-		<0.5	<0.5	11			_	
Annual	MW4	dichloropropane	Annual	<1	<1	ug/l				no
Annual	MW4	2-Hexanone	Annual	<0.5	<0.5	ug/l			0	no
Annual	MW4	1,2-dibromoethane	Annual	₹0.5	<0.5	ug/l			0	no
Annual	MW4	Chlorobenzene	Annual	<0.5	<0.5			1	0	no
				<2	<2					
Annual	MW4	1,1,1,2- tetrachloroethane	Annual			ug/l			0	no
Annual	MW4	Ethylbenzene	Annual	0.6	0.6	ug/l		10		no
Annual	MW4	Xylene P&M		<0.5	<0.5			10		no
Alliudi	IVI VV4	Ayielie Falvi	Annual	10.0	10.0	ug/1			0	110

Ground	water/Soil m	nonitoring te	mplate		Lic No:	W0068-03		Year	2012		
Annual	MW4	Styrene		Annual	<2	<2	ug/l			0	no
					<0.5	<0.5					
Annual	MW4	Isopropylbenzene		Annual	<0.5	<0.5	ug/l				no
Annual	MW4	Bromobenzene		Annual	<0.5	<0.5	ug/l			U	no
		1,1,2,2-									
Annual	MW4	tetrachloroethane		Annual			ug/l			0	no
Annual	MW4	1,2,3- trichloropropane		Annual	<2	<2	ug/l			0	no
					<2	<2					
Annual	MW4	Trans 14 Dichloro 2 Butene, tran		Annual			ug/I				no
Annual	MW4	Propylbenzene		Annual Annual	<0.5	<0.5					no
Annual	MW4	2-chlorotoluene		Annual	<0.5	<0.5	ug/l				no
Annual	MW4	4-chlorotoluene		Annual	<0.5	<0.5	-				no
				7411001	<0.5	<0.5					
		1,3,5-									
Annual	MW4	trimethylbenzene		Annual	<0.5	<0.5	ug/l			U	no
Annual	MW4	Tert Butyl Benzene		Annual			ug/l			0	no
		1.2.4			<0.5	<0.5					
Annual	MW4	1,2,4- trimethylbenzene		Annual			ug/l			o	no
					<0.5	<0.5					
Annual	MW4	sec-butylbenzene		Annual			ug/l			0	no
Annual	MW4	P Isopropyltoluene		Annual	<0.5	<0.5	ug/l			0	no
Annual	MW4	N Butyl Benzene		Annual	<0.5	<0.5	•				no
		1,2-dibromo-3-			<2	<2	-				
Annual	MW4	chloropropane		Annual	0.5	0.5	ug/l			0	no
Annual	MW4	1,2,3- trichlorobenzene		Annual	<0.5	<0.5	ug/l			0	no
Quarterly	MW7	рН	Meter	Quarterly	7.73	7.39			9.5		data not available
Quarterly	MW7	Temp	Meter	Quarterly	16.3	13.7			25		data not available
Quarterly	MW7	Elec.Conductivity	Meter	Quarterly	6100	4750			1000		data not available
	MW7	Chlorides	titration	Quarterly	7200	4523	mg/l		250		data not available
O	14147	Ammoniacal	ICE.		180	54					data wat awallahila
Quarterly Quarterly	MW7 MW7	Nitorgen Iron	ISE	Quarterly	6972	5152	mg/l		0.02		data not available data not available
Quarterly	MW7	TON		Quarterly Quarterly	<0.138	<0.138	mg/l		0.2 No abnormal change		data not available
Quarterly	MW7	TOC	HACH	Quarterly	112	44.54			ivo abilorillai cilange		data not available
Annual	MW7	Cadmium		Annual	0.1	0.1	6/.		0.005		data not available
Annual	MW7	Chromium (total)		Annual	39.8	39.8	. 0		0.003		data not available
Annual	MW7	Copper		Annual	0.006	0.006	-8/		0.03		data not available
Annual	MW7	Cyanide (Total)		Annual	12	12	ug/l		0.01		data not available
Annual	MW7	Lead		Annual	<0.3	<0.3	ug/I		0.01		data not available
Annual	MW7	Mangnesium		Annual	50.4	50.4	mg/I		50		data not available
Annual	MW7	Manganese		Annual	5337.6	5337.6			0.05		data not available
Annual	MW7	Mercury		Annual	0.05	0.05	ug/I		0.001		data not available
Annual	MW7	Nickle		Annual	21.6	21.6	ug/l		0.02		data not available
Annual	MW7	Potassium		Annual	156.7	156.7	mg/l		5		data not available
Annual	MW7	Sulphate		Annual	48.8	48.8	mg/l		200		data not available
Annual	MW7	Total Alkalinity		Annual	1587.7	1587.7	mg/l				data not available
Annual	MW7	Total Phosphorus		Annual			mg/l				data not available
	MW7	Phenols		Annual			mg/l ug/l		0.5		data not available
Annual Annual	MW7			Annual	<0.5	<0.5	ug/I		0.5		data not available
Annual	IVI VV /	Acenaphthylene	J	Annual	40.0	νο.ο	ug/i				uata not dydnabie

Ground	water/Soil n	nonitoring template		Lic No:	W0068-03		Year	2012	
Annual	MW7	Anthracene	Annual	0.1	0.1	ug/l			data not available
Annual	MW7	Benzene	Annual	<2	<2	ug/l		1	data not available
		Bromodichlorometh		<1	<1				
Annual	MW7	ane	Annual	<1	<1	ug/l			data not available
Annual	MW7	Bromoform	Annual	<1		G8/ ·			data not available
Annual	MW7	Chloroform	Annual			-8/		12	data not available
Annual	MW7	Chrysene Dibromochlorometh	Annual	<1		-8/			data not available
Annual	MW7	ane	Annual	×1		ug/l			data not available
Annual	MW7	Fluoranthene	Annual	<1	<1	ug/l			data not available
Annual	MW7	Fluorene	Annual	<1	<1	ug/l			data not available
Annual	MW7	Naphthalene	Annual	37.7	37.7	ug/l			data not available
		Dibromochlorometh		<1	<1				
Annual	MW7	ane	Annual	<1	<1	ug/l			data not available
Annual	MW7	Pentachlorophenol	Annual	<1	<1	ug/l		2	data not available
Annual	MW7	Phenanthrene	Annual	<1	<1				data not available
Annual	MW7	Pyrene	Annual	<1	<1	ug/l			data not available
				<0.1	<0.1				
Annual	MW7	Tetrachloroethene	Annual	0.4	0.4	ug/l			data not available
Annual	MW7	Trichloroethene	Annual	<0.1	<0.1	ug/l			data not available
Annual	MW7	Hexachlorobenzene	Annual	<1	<1	ug/l		0.03	data not available
		Hexachlorobutadien	7111001	<0.5	<0.5	- 0		0.03	
Annual	MW7	e	Annual			ug/I		0.1	data not available
Annual	MW7	2,4,6- Trichlorophenol	Annual	<1	<1	ug/l			data not available
Ailiuai	101007	Triciliorophenoi	Annuai	<1	<1				uata not avaliable
Annual	MW7	2,4-Dichlorophenol	Annual			ug/l			data not available
				<1	<1				
Annual	MW7	2,4-Dimethylphenol	Annual	<1	<1	ug/l			data not available
Annual	MW7	2-Chlorophenol 1,2,4-	Annual	<0.5	<0.5	ug/I			data not available
Annual	MW7	trichlorobenzene	Annual	40.0	ν ν ν ν ν ν ν ν ν ν ν ν ν ν ν ν ν ν ν	ug/l			data not available
		1,2-		<0.5	<0.5				
Annual	MW7	dichlorobenzene 1,3-	Annual	<0.5	<0.5	ug/l			data not available
Annual	MW7	dichlorobenzene	Annual	<0.5	<0.5	ug/l			data not available
		1,4-		<0.5	<0.5				
Annual	MW7	dichlorobenzene	Annual			ug/l			data not available
Annual	MW7	2,4,5- Trichlorophenol	Annual	<1	<1	ug/l			data not available
				<1	<1	-			
Annual	MW7	2,4-Dinitrotoluene	Annual			ug/l			data not available
Annual	MW7	2,6-Dinitrotoluene	Annual	<1	<1	ug/I			data not available
		2,0 S. Att Ottofactio	Alliudi	<1	<1	-5/ ·			data not available
		2-							
Annual	MW7	Chloronaphthalene	Annual			ug/l			data not available
		2-		<1	<1				
Annual	MW7	Methylnaphthalene	Annual			ug/l		]	data not available
Annual	MW7	2-Methylphenol	Annual	<1	<1	ug/l			data not available
Annual	MW7	2-Nitrophenol	Annual	<1	<1	ug/l			data not available
	14047	4-Bromophenyl		<1	<1				
Annual	MW7	Phenyl Ether 4-Chloro-3-	Annual	.4	.4	ug/l			data not available
Annual	MW7	methylphenol	Annual	<1	<1	ug/l			data not available
		4-Chlorophenyl		<1	<1				
Annual	MW7	phenyl ether	Annual			ug/l			data not available
Annual	MW7	4-Nitrophenol	Annual	<5	<5	ug/l			data not available

<u>Gro</u> unc	lwater/Soi	I monitoring template		Lic No:	W0068-03		Year		
ınnual	MW7	Acenaphthene	Annual	<	l <1	ug/l			data not available
		D () II		<	<1	11			
Annual	MW7 MW7	Benzo(a)anthracene	Annual	<		ug/l			data not available
Annual	MW7	Benzo(a)pyrene Benzo(b)fluoranthe	Annual	<		ug/l			data not available
Annual	MW7	ne	Annual	ì	`	ug/l			data not available
		Benzo(g,h,i)perylen		<	1 <1				
Annual	MW7	e December 1	Annual			ug/l			data not available
Annual	MW7	Benzyl Butyl Phthalate	Annual	<	<1	ug/l			data not available
		Bis(2-	, unide	<	1 <1	-87			
		chloroethoxy)metha							
Annual	MW7	ne	Annual			ug/l			data not available
		Bis(2-		<	<1				
Annual	MW7	chloroethyl)ether	Annual			ug/I			data not available
		Bis(2-		<	<1				
Annual	MW7	chloroisopropyl)eth	Annual			ug/l			data not available
uui		Bis(2-	Ailliudi	<	5 <5				data not available
		ethylhexyl)phthalat							
Annual	MW7	e Dibaaada bhaasii	Annual			ug/l			data not available
Annual	MW7	Dibenz(a,h)anthrace ne	Annual	<	<1	ug/l			data not available
Annual	MW7	Dibenzofuran	Annual	<	<1				data not available
Annual	MW7	Diethylphthalate		<		u <sub>B</sub> / .			data not available
Ailiuai	101007	Dietryipittialate	Annual	<		ug/1			uata not available
Annual	MW7	di-n-Butylphthalate	Annual			ug/l			data not available
				<	<1				
Annual	MW7	Di-n-octylphthalate	Annual			ug/l			data not available
Annual	MW7	Diphenylamine	Annual	<		ug/l			data not available
Annual	MW7	Hexachloroethane	Annual	<	<1	ug/l			data not available
	-	Indeno(1,2,3-	Airida	<	<1	-87			
Annual	MW7	c,d)pyrene	Annual			ug/l			data not available
Annual	MW7	Isophorone	Annual	<	<1	ug/l			data not available
Annual	MW7	Nitrobenzene	Annual	<0.5	<0.5	ug/l			data not available
		n-Nitrosodi-n-		<	<1				
Annual	MW7	propylamine	Annual			ug/l			data not available
Annual	MW7	Acetone	Annual	<2		-0/			data not available
Annual	MW7	Dichloromethane	Annual	<	<5	ug/l			data not available
Annual	MW7	Tetrahydrofuran	Annual	<0.5	<0.5				data not available
Annual	MW7	Toluene	Annual	1.9		· Ur		10	
Annual	MW7	Xylene -o	Annual	0.6	0.6	G8/ 1		10	
	1	Dichlorodifluoromet	Aimad	<10				10	auto not available
Annual	MW7	hane	Annual			ug/I			data not available
Annual	MW7	Chloromethane	Annual	<0.5		ug/l			data not available
		Ethyl		<0.5	<0.5				
Annual	MW7	Chloride/Chloroeth ane	Annual			ug/l			data not available
Annual	MW7	Vinyl Chloride	Annual	<0.5	5 <0.5				data not available
	_		Annual	<0.5	5 <0.5	· G			
Annual	MW7	Bromomethane Trichloromonofluor	Annual	<0.5		ug/I			data not available
Annual	MW7	omethane	Annual	<0.3	<0.5	ug/l			data not available
				<0.5	<0.5				
	1404/7	Ethyl Ether/Diethyl							d-t
Annual	MW7	Ether	Annual	<0.5	5 <0.5	ug/l			data not available
Annual	MW7	11 Dichloroethene	Annual	<0.8	<0.5	ug/l			data not available

Ground	water/Soil r	monitoring template		Lic No:	W0068-03		Year 2012				
	MW7	Iodomethane/Meth yl Iodide		<0.5	<0.5					data not available	
Annual	IVIW7	yi lodide	Annual	<0.5	<0.5	ug/l				data not available	
Annual	MW7	Carbon Disulphide	Annual			ug/l				data not available	
Annual	MW7	Allyl Chloride	Annual	<0.5	<0.5	ug/l				data not available	
		Chlormethyl Cyanide/Chloroacet		<0.5	<0.5						
Annual	MW7	onitrile	Annual			ug/l				data not available	
Annual	MW7	Propanenitrile	Annual	<10	<10	ug/l				data not available	
A	MW7	Trans-1,2		<0.5	<0.5					determine the land	
Annual Annual	MW7	Dichloroethene MtBE	Annual	<0.5	i <0.5	ug/l ug/l				data not available data not available	
Annuai	IVIW7	MIRE	Annual	<0.5	<0.5	ug/I				data not available	
Annual	MW7	1,1-dichloroethane	Annual	10.0	, , , , , , , , , , , , , , , , , , , ,	ug/I		30		data not available	
A	1404/7	2,2-		<0.5	<0.5					determine the land	
Annual	MW7	dichloropropane cis-12	Annual	<0.5	<0.5	ug/l				data not available	
Annual	MW7	Dichloroethene	Annual	10.0	, , , , , , , , , , , , , , , , , , , ,	ug/I				data not available	
Annual	MW7	2-Butanone	Annual	<5		46/1				data not available	
Annual	MW7	Methyl Acrylate	Annual	<0.5	<0.5	ug/l				data not available	
Annual	MW7	Bromochlorometha ne	Annual	<0.5	<0.5	ug/I				data not available	
Amiludi	IVI VV /	iic .	Annuai	<0.5	i <0.5	ug/1				uata HUL AVAIIADIE	
Annual	MW7	Methacrylonitrile	Annual			ug/l				data not available	
Annual	MW7	1,1,1- trichloroethane	A	<0.5	<0.5	ug/l		500		data not available	
Annual	MW7	1-Chlorobutane	Annual Annual	<0.5	i <0.5	ug/I		500		data not available	
Ailliuui	101007	Carbon	Ailliudi	<0.5	i <0.5	ив/1				data not available	
Annual	MW7	Tetrachloride	Annual			ug/l				data not available	
Annual	MW7	11 Dichloropropene	Annual	<0.5	<0.5	ug/l				data not available	
Allitual	101007	11 Dichioroproperie	Annual	<0.1	<0.1	ug/1				uata ilot avallable	
Annual	MW7	1,2 dicloroethane	Annual			ug/l				data not available	
Annual	MW7	1,2- dichloropropane	A	<0.5	<0.5	ug/I				data not available	
Allitual	101007	dicilioropropane	Annual	<0.5	i <0.5	ug/1				uata ilot avallable	
Annual	MW7	Dibromomethane	Annual			ug/l				data not available	
Annual	MW7	Methyl Methacrylate	Annual	<0.5	<0.5	ug/l				data not available	
Allitual	101007	ivietriacrylate	Annuai	<2	! <2					uata ilot avallable	
		13									
Annual	MW7	Dichloropropene,cis MIBK/4 Methyl 2	Annual	<2	2 <2	ug/l				data not available	
Annual	MW7	Pentanone	Annual	<2	<2	ug/l				data not available	
		13		<2	. <2						
Annual	MW7	Dichloropropene,tra ns	Annual			ug/l				data not available	
7 4111001			Ailliudi	<2	. <2					data not available	
Annual	MW7	Ethyl Methacrylate	Annual			ug/l				data not available	
Annual	MW7	112 Trichloroethane	Annual	<0.5	<0.5	ug/l				data not available	
uul		1,3-	Ailliuai	<0.5	<0.5	-0/					
Annual	MW7	dichloropropane	Annual			ug/I				data not available	
Annual	MW7	2-Hexanone	Annual	<1		ug/I				data not available	
Annual	MW7	1,2-dibromoethane	Annual	<0.5	<0.5	ug/I				data not available	
Annual	MW7	Chlorobenzene	Annual	12.2	12.2	ug/l		1		data not available	
			Aillia	<2	. <2			1			
		1,1,1,2-				76					
Annual	MW7	tetrachloroethane	Annual	8.3	83	ug/l ug/l		-		data not available	
Annual	MW7	Ethylbenzene	Annual					10		data not available	
Annual	MW7	Xylene P&M	Annual	<0.5	<0.5	ug/I				data not available	

Ground	water/Soil r	nonitoring templa	ate	Lic No: W00		Year	2012	
Annual	MW7	Styrene	Annual	<2	<2 ug/I			data not available
Annual	MW7	Isopropylbenzene	Annual	2	2 ug/l			data not available
Annual	MW7	Bromobenzene	Annual	<0.5	<0.5 ug/I			data not available
Annual	MW7	1,1,2,2- tetrachloroethane	Annual	<0.5	<0.5 ug/l			data not available
Annual	MW7	1,2,3- trichloropropane	Annual	<2	<2 ug/l			data not available
Annual	MW7	Trans 14 Dichloro 2 Butene, tran	Annual	<2	<2 ug/l			data not available
Annual	MW7	Propylbenzene	Annual	<0.5	<0.5 ug/I			data not available
Annual	MW7	2-chlorotoluene	Annual	<0.5	<0.5 ug/l			data not available
Annual	MW7	4-chlorotoluene	Annual	<0.5	<0.5 ug/l			data not available
Annual	MW7	1,3,5- trimethylbenzene	Annual	<0.5	<0.5 ug/l			data not available
Annual	MW7	Tert Butyl Benzene	Annual	<0.5	<0.5 ug/l			data not available
Annual	MW7	1,2,4- trimethylbenzene	Annual	<0.5	<0.5 ug/l			data not available
Annual	MW7	sec-butylbenzene	Annual	<0.5	<0.5 ug/I			data not available
Annual	MW7	P Isopropyltoluene	Annual	<0.5	<0.5 ug/I			data not available
Annual	MW7	N Butyl Benzene	Annual	1.9	1.9 ug/I			data not available
Annual	MW7	1,2-dibromo-3- chloropropane	Annual	<2	<2 ug/I			data not available
Annual	MW7	1,2,3- trichlorobenzene	Annual	<0.5	<0.5 ug/l			data not available

<sup>.+</sup> where average indicates arithmetic mean

**Table 2: Downgradient Groundwater monitoring results** 

10010 =1	Downgradic	ine Groundi	ater momen	ing results							
Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration	Average Concentration	unit	GTV's*		% change in average concentration previous year +/-	Upward trend in yearly average pollutant concentration over last 5 years of monitoring data
Quarterly	MW1	рН	Meter	Quarterly	8	7.55			9.5		no
Quarterly	MW1	Temp	Meter	Quarterly	12	12			25		no
Quarterly	MW1	Elec.Conductivity	Meter	Quarterly	29400	29400			1000		no
	MW1	Chlorides	titration	Quarterly	13245	4061	mg/l		250	205%+	no
Quarterly	MW1	Ammoniacal Nitorgen	ISE	Quarterly	5.6	5	mg/l		Trigger Limit of 20mg/	38%-	no
Quarterly	MW1	Iron		Quarterly	124	71	ug/l		0.2	31.5%-	no
Quarterly	MW1	TON		Quarterly	0.798	0.7085			No abnormal change	413%-	no
Quarterly	MW1	тос	HACH	Quarterly	20	19.875	mg/l		Tigger limit 10-	660%+	no
Annual	MW1	Cadmium		Annual	1.1		ug/l		0.005	C	no
Annual	MW1	Chromium (total)		Annual	34.9		ug/l		0.03	C	no
Annual	MW1	Copper		Annual	0.118	0.006			0.03	C	no
Annual	MW1	Cyanide (Total)		Annual	10		ug/l		0.01	C	no
Annual	MW1	Lead		Annual	<0.3	<0.3			0.01	C	no
Annual	MW1	Mangnesium		Annual	596.1	50.4	mg/l		50	C	no

<sup>.++</sup> maximum concentration indicates the maximum measured concentration from all monitoring results produced during the reporting year

Groundy	water/Soil m	onitoring template		Lic No:	W0068-03		Year	2012		
Annual	MW1	Manganese	Annual	4870.6	5337.6	ug/l		0.05	0	no
Annual	MW1	Mercury	Annual	0.1	0.05	ug/l		0.001		no
Annual	MW1	Nickle	Annual	4.3	21.6			0.02		no
Annual	MW1	Potassium	Annual	199.3	156.7	mg/l		5		no
	MW1	Sulphate	Annual	1132.2	48.8	mg/l		200		no
Annual	MW1	Total Alkalinity	Annual	509	1587.7	mg/l		200		no
Alliludi	IVIVVI	Total Aikallinty	Alliudi	5.09		IIIg/I			· ·	110
Annual	MW1	Total Phosphorus	Annual			mg/l			0	no
Annual	MW1	Phenols	Annual	<0.15		ug/l		0.5	0	no
Annual	MW1	Acenaphthylene	Annual	<0.5	<0.5	ug/l			0	no
Annual	MW1	Anthracene	Annual	0.1	0.1	ug/l			0	no
Annual	MW1	Benzene	Annual	<2	<2	ug/l		1	0	no
		Bromodichlorometh		<1	<1					
Annual	MW1	ane	Annual			ug/l			0	no
Annual	MW1	Bromoform	Annual	<1		46/1			0	no
Annual	MW1	Chloroform	Annual	<1		-8/ -		12	0	no
Annual	MW1	Chrysene	Annual	<1	<1	ug/l			0	no
		Dibromochlorometh		<1	<1	/1				
Annual	MW1	ane	Annual		.4	ug/l				no
Annual	MW1	Fluoranthene	Annual	<1		- 0,				no
Annual	MW1	Fluorene	Annual	<1		36/1				no
Annual	MW1	Naphthalene	Annual	<2.0	<2.0	- 0			0	no
Annual	MW1	Dibromochlorometh ane	Annual	<1	<1	ug/l			0	no
Annual	MW1	Pentachlorophenol	Annual	<1	<1	ug/l		2	0	no
Annual	MW1	Phenanthrene	Annual	<1	<1			-		no
Annual	MW1	Pyrene	Annual	<1	<1	ug/l				no
		.,,	7411001	<0.1	<0.1	-6/-				
Annual	MW1	Tetrachloroethene	Annual			ug/l			0	no
Annual	MW1	Trichloroethene	Annual	<0.1	<0.1	ug/l			0	no
Annual	MW1	Hexachlorobenzene	Annual	<1	<1	ug/l		0.03	0	no
		Hexachlorobutadien		<0.5	<0.5	,				
Annual	MW1	e	Annual			ug/l		0.1	0	no
Annual	MW1	2,4,6- Trichlorophenol	A	<1	<1	ug/I			0	no
Allitual	IVIVVI	Пспогорнено	Annual	<1	<1	ug/1			Ü	110
Annual	MW1	2,4-Dichlorophenol	Annual			ug/I			0	no
Annual	MW1	2,4-Dimethylphenol	Annual	<1	<1	ug/I			0	no
Annual	MW1	2-Chlorophenol	Annual	<1	<1	ug/l			0	no
		1,2,4-		<0.5	<0.5					
Annual	MW1	trichlorobenzene 1,2-	Annual	<0.5	<0.5	ug/l			0	no
Annual	MW1	dichlorobenzene	Annual			ug/l			0	no
Annual	MW1	1,3- dichlorobenzene	Annual	<0.5	<0.5	ug/l			0	no
		1,4-		<0.5	<0.5					
Annual	MW1	dichlorobenzene 2,4,5-	Annual	<1	<1	ug/l			0	no
Annual	MW1	Trichlorophenol	Annual			ug/l			0	no
Annual	MW1	2,4-Dinitrotoluene	Annual	<1	<1	ug/l			0	no
Annual	MW1	2,6-Dinitrotoluene		<1	<1	ug/l				no
Aiilludi	INIAAT	z,o-Dinid Otoluene	Annual	<1	<1	ug/ı			0	110
Annual	MW1	2- Chloronaphthalene	Annual			ug/l			0	no

Ground	lwater/Soil	monitoring template	e	Lic No:	Lic No: W0068-03			Year 2012		
		2-		<	<1					
Annual	MW1	Methylnaphthalene	Annual		ug/I			o no		
Annual	MW1	2-Methylphenol	Annual	<	<1 ug/I			o no		
Annual	MW1	2-Nitrophenol	Annual	<	<1 ug/l			0 no		
Annual	MW1	4-Bromophenyl Phenyl Ether	Annual	<	<1 ug/l			<sup>0</sup> no		
		4-Chloro-3-		<	<1					
Annual	MW1	methylphenol 4-Chlorophenyl	Annual	<	ug/I			0 no		
Annual	MW1	phenyl ether	Annual		ug/I			o no		
Annual	MW1	4-Nitrophenol	Annual	</td <td>u<sub>6</sub>/.</td> <td></td> <td></td> <td>0 no</td> <td></td>	u <sub>6</sub> /.			0 no		
Annual	MW1	Acenaphthene	Annual	<	. 0			<sup>0</sup> no		
Annual	MW1	Benzo(a)anthracene	Annual	<	<1 ug/l			o no		
Annual	MW1	Benzo(a)pyrene	Annual	<				0 no		
		Benzo(b)fluoranthe		<	<1					
Annual	MW1	ne Panaga h ilmandan	Annual	<u> </u>	ug/l			0 no		
Annual	MW1	Benzo(g,h,i)perylen e	Annual	<	<1 ug/l			<sup>0</sup> no		
		Benzyl Butyl	_	<	<1					
Annual	MW1	Phthalate Bis(2-	Annual	<	ug/l			0 no		
		chloroethoxy)metha		`	<1					
Annual	MW1	ne	Annual		ug/I			o no		
		Bis(2-		<	<1					
Annual	MW1	chloroethyl)ether	Annual		ug/I			o no		
		Bis(2-		<						
		chloroisopropyl)eth	_							
Annual	MW1	er Bis(2-	Annual	<	ug/I 5 <5			0 no		
		ethylhexyl)phthalat			,					
Annual	MW1	e	Annual		ug/l			0 no		
Annual	MW1	Dibenz(a,h)anthrace ne	Annual	<	<1 ug/l			0 no		
Annual	MW1	Dibenzofuran	Annual	<	<1 ug/l			0 no		
Annual	MW1	Diethylphthalate	Annual	<				0 no		
A	MW1	di - Distributado		<	<1					
Annual	IVIVI	di-n-Butylphthalate	Annual	<	ug/l <1			0 no		
Annual	MW1	Di-n-octylphthalate	Annual		ug/I			<sup>0</sup> no		
Annual	MW1	Diphenylamine	Annual	<	-8/			0 no		
Annual	MW1	Hexachloroethane	Annual	<	<1 ug/l			0 no		
		Indeno(1,2,3-		<	<1					
Annual	MW1	c,d)pyrene	Annual		ug/l			0 no		
Annual	MW1	Isophorone	Annual	<	ug/ i			0 no		
Annual	MW1	Nitrobenzene n-Nitrosodi-n-	Annual	<0.5	<0.5 ug/l			<sup>0</sup> no		
Annual	MW1	n-Nitrosodi-n- propylamine	Annual	<	<1 ug/l			o no		
Annual	MW1	Acetone	Annual	<2				0 no		
Annual	MW1	Dichloromethane	Annual	</td <td>i &lt;5</td> <td></td> <td></td> <td>0 no</td> <td></td>	i <5			0 no		
Annual	MW1 MW1	Tetrahydrofuran	Annual Annual	<0.5	ug/I 6 <0.5 ug/I			0 no		
Annual	MW1	Toluene		<0.5						
Annual	MW1	Xylene -o	Annual Annual	<0.5			10			
		Dichlorodifluoromet	Annuai	<10	<10		10			
Annual	MW1	hane	Annual	<0.5	ug/I			0 no		
Annual	MW1	Chloromethane	Annual	<0.8	<0.5 ug/l			0 no		

		monitoring template		Lic No:	W0068-03	Year	2012	
		Ethyl		<0.5	<0.5			
Annual	MW1	Chloride/Chloroeth ane	Annual		ug/l			o no
Annual	MW1	Vinyl Chloride	Annual	<0.5	<0.5 ug/l			0 no
Annual	MW1	Bromomethane	Annual	<0.5	<0.5 ug/l			0 no
- Iniuui	101001	Trichloromonofluor	Ailliudi	<0.5	<0.5			3110
Annual	MW1	omethane	Annual		ug/I			o no
		Cabril Cabril (Disabil)		<0.5	<0.5			
Annual	MW1	Ethyl Ether/Diethyl Ether	Annual		ug/l			o no
			, amou	<0.5	<0.5			
Annual	MW1	11 Dichloroethene	Annual		ug/l			o no
Annual	MW1	Iodomethane/Meth yl Iodide	Annual	<0.5	<0.5 ug/l			o no
		y rodiuc	Ailliudi	<0.5	<0.5			
Annual	MW1	Carbon Disulphide	Annual		ug/I			0 no
Annual	MW1	Allyl Chloride	Annual	<0.5	<0.5 ug/l			<sup>0</sup> no
		Chlormethyl Cyanide/Chloroacet		<0.5	<0.5			
Annual	MW1	onitrile	Annual		ug/l			o no
Annual	MW1	Propanenitrile	Annual	<10	<10 ug/l			0 <b>no</b>
		Trans-1,2		<0.5	<0.5			
Annual	MW1	Dichloroethene	Annual		ug/l			o no
Annual	MW1	MtBE	Annual	<0.5	<0.5 ug/l			0 no
Annual	MW1	1,1-dichloroethane	Annual	<0.5	<0.5 ug/l		30	o no
		2,2-	Amuai	<0.5	<0.5		30	- 110
Annual	MW1	dichloropropane	Annual		ug/I			0 no
Annual	MW1	cis-12 Dichloroethene		<0.5	<0.5			0.00
Annual	MW1	2-Butanone	Annual	<5	ug/I <5 ug/I			0 no 0 no
Annual	MW1	Methyl Acrylate	Annual Annual	<0.5	<0.5 ug/l			0 no
Alliudi	IVIVVI	Bromochlorometha	Annuai	<0.5	<0.5			0 110
Annual	MW1	ne	Annual		ug/I			o no
				<0.5	<0.5			
Annual	MW1	Methacrylonitrile 1,1,1-	Annual	<0.5	ug/I <0.5			<sup>0</sup> no
Annual	MW1	trichloroethane	Annual	<b>V</b> 0.3	ug/I		500	o no
Annual	MW1	1-Chlorobutane	Annual	<0.5	<0.5 ug/l			o no
		Carbon		<0.5	<0.5			
Annual	MW1	Tetrachloride	Annual	2.5	ug/l			o no
Annual	MW1	11 Dichloropropene	Annual	<0.5	<0.5 ug/l			o no
				<0.1	<0.1			
Annual	MW1	1,2 dicloroethane	Annual		ug/l			o no
Annual	MW1	1,2- dichloropropane	Annual	<0.5	<0.5 ug/l			<sup>0</sup> no
		z.s.noropropane	Amidd	<0.5	<0.5			VIII0
Annual	MW1	Dibromomethane	Annual		ug/I			0 no
Annual	MW1	Methyl Methacrylate	Annu-1	<0.5	<0.5			0 no
miliuai	IAIAAT	iviculaci ylate	Annual	<2	ug/l <2			VIIIO
		13						
Annual	MW1	Dichloropropene,cis	Annual		ug/I			0 no
Annual	MW1	MIBK/4 Methyl 2 Pentanone	Annual	<2	<2 ug/l			o no
		13	Amidal	<2				V IIIO
		Dichloropropene,tra						
Annual	MW1	ns	Annual		ug/l			0 no
	1			<2				olno
Annual	MW1	Ethyl Methacrylate	Annual		ug/l		J	0 no

Interim

Guidelin

<u>Values</u>

Ground	water/Soil n	nonitoring template		Lic No:	W0068-03		Year	2012		
		1,3-		<0.5	<0.5					
Annual	MW1	dichloropropane	Annual			ug/l			0	no
Annual	MW1	2-Hexanone	Annual	<1	<1	ug/l			0	no
				<0.5	<0.5					
Annual	MW1	1,2-dibromoethane	Annual	<0.5	-0 E	ug/l				no
Annual	MW1	Chlorobenzene	Annual		<0.5			1	0	no
		1,1,1,2-		<2	<2					
Annual	MW1	tetrachloroethane	Annual			ug/l			0	no
Annual	MW1	Ethylbenzene	Annual	<0.5	<0.5	ug/l		10	0	no
Annual	MW1	Xylene P&M	Annual	<0.5	<0.5	ug/l			0	no
Annual	MW1	Styrene	Annual	<2	<2				0	no
				<0.5	<0.5					
Annual	MW1	Isopropylbenzene	Annual			ug/l				no
Annual	MW1	Bromobenzene	Annual	<0.5	<0.5	ug/l			0	no
		1,1,2,2-		<0.5	<0.5					
Annual	MW1	tetrachloroethane	Annual			ug/l			0	no
, umadi		1,2,3-	Aimudi	<2	<2					110
Annual	MW1	trichloropropane	Annual			ug/I			0	no
				<2	<2					
Annual	MW1	Trans 14 Dichloro 2 Butene, tran	Annual			ug/l			0	no
Annual	MW1	Propylbenzene		<0.5	<0.5	ug/I				no
Annual	MW1	2-chlorotoluene	Annual	<0.5	<0.5	ug/I				no
	MW1		Annual	<0.5	<0.5	ug/I				no
Annual	IVIVVI	4-chlorotoluene	Annual	<0.5	<0.5	ug/i			0	110
		1,3,5-		<b>V</b> 0.3	<b>V</b> 0.0					
Annual	MW1	trimethylbenzene	Annual			ug/I			0	no
				<0.5	<0.5					
Annual	MW1	Tert Butyl Benzene	Annual	<0.5	<0.5	ug/l			0	no
		1,2,4-		<0.5	<0.5					
Annual	MW1	trimethylbenzene	Annual			ug/l			0	no
				<0.5	<0.5					
Annual	MW1	sec-butylbenzene	Annual	^=	0.5	ug/l			0	no
Annual	MW1	P Isopropyltoluene	Annual	<0.5	<0.5	ug/l			0	no
Annual	MW1	N Butyl Benzene	Annual	<0.5	<0.5					no
	+	1,2-dibromo-3-	, amout	<2	<2					
Annual	MW1	chloropropane	Annual			ug/l			0	no
A 1		1,2,3-		<0.5	<0.5					
Annual	MW1	trichlorobenzene	Annual			ug/I			0	no

<sup>\*</sup> please note exceedance of a relevant Groundwater threshold value (GTV) at a representative monitoring point does not indicate non compliance, an exceedance triggers further investigation to confirm whether the criteria for poor groundwater chemical status are being met.

<sup>\*\*</sup>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)

\*\*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 Surface value of the Surface val

# 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: W0068-03 Year 2012

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

			Commentary
1	ELRA initial agreement status		
		SELECT	Site Operational
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	

	<b>Environmental Management Programme/Continuous Improvement Programme</b>	e template	Lic No:	W0068-03	Year
	Highlighted cells contain dropdown menu click to view		Additional Inform	nation	
1	Do you maintain an Environmental Mangement System (EMS) for the site. If yes, please detail in additional information	Yes	2008. It include description Engineering d	ted and retained on site on an annual basis since es sections on Use of manual, Site location and n, Types of waste accepted and procedures, letails, Control of nuisance and Environmental nanagement system requirements.	
2	Does the EMS reference the most significant environmental aspects and associated impacts on-site	Yes			
3	Does the EMS maintain an Environmental Management Programme (EMP) as required in accordance with the licence requirements	Yes			
4	Do you maintain an environmental documentation/communication system to inform the public on environmental performance of the facility, as required by the licence	Yes			

<b>Environmental Management Programme</b>	e (EMP) report				
Objective Category	Target	Status (% completed)	How target was progressed	Responsibility	Intermediate outcomes
			Improvement of gas		
	50% Reduction in Odour		extraction system and		
Reduction of emissions to Air	Complains	100	operational	Individual	Less complaints
			Improvement of Civic		
			Amenity Site layout and		
	Improve annual recycling		improved maintenance of		
Materials Handling/Storage/Bunding	rate by 5%	90	existing infrastructure	Individual	Installation of infrastructure
			Liasing with Security		
			Company and An Gardaí		
			Síochana to deter would-be		Improved Environmental
Additional improvements	Improve Site security	50	intruders	Individual	Management Practices
	To control environmental		Reduction of waste intake,		Increased compliance with
Additional improvements	nuisances at the facilty	80	improved site practises	Individual	licence conditions
			Improvement of site practise		
	Improve annual		to ensure minimal		
	environmental parameters		interaction with surrounding		Increased compliance with
Groundwater protection	at the site	50	environment	Individual	licence conditions

Noise monitoring summary report	Lic No:	W0068-03	Year	2012
			1	
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	Guidance	Yes		
"Checklist 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?		N/A		
5 Have there been changes relevant to site noise emissions (e.g. plant or operational changes) since survey?	the last noise	Yes		

Table N1: Noi	se monitoring s	ummary									
Date of monitoring	Time period	Noise location (on site)	Noise sensitive location -NSL (if applicable)	$LA_{eq}$	LA <sub>90</sub>	LA <sub>10</sub>	LA <sub>max</sub>	Tonal or Impulsive noise* (Y/N)	If tonal /impulsive noise was identified was 5dB penalty applied?	Comments (ex. main noise sources on site, & extraneous noise ex. road traffic)	Is <u>site_compliant</u> with noise limits (day/evening/night)?
04/12/2012	30min	N1		55	50	57	50	No	SELECT	No facility emissions audible. N25 traffic to NW and N continuously audible and dominant. Rustling vegetation locally. No other noise apart from bird song/calls and aircraft.	Yes
04/12/2012	30min	N2		51	49	53	49	No		No facility emissions audible. N25 traffic to NW and N continuously audible and dominant. No other noise apart from bird song/calls and aircraft.	Yes
05/12/2012		N3		49	45	52	44	No		Gas flare plant emissions audible at low level. Leachate pump switched on approx 10:30 - 10:40 continuously audible at low level, not significant. Continuous emissions also slightly audible from offsite waste management facility. Distant traffic continuously audible and dominant. Bird song/calls and aircraft.	Yes

04/12/2012 30min	N4	51	48	53	47-50	Yes	No	Leachate pump continuously audible from start of interval to 14:27 when truck pulled up and idled on weighbridge until interval end. Before truck, noise audible from sporadic vehicle movements through gate and into CAS. Distant road traffic and emissions from vents at adjacent waste management facility audible at continuously low level. Bird song/calls and aircraft.	Yes
05/12/2012 30min	S1	71	52	75	52	No		No facility emissions audible and no emissions audible other than N25 traffic	Yes
04/12/2012 30min	52	57	52	60	52	No		No emissions audible from site. Continuous road traffic to SW, W and NW dominant. Occasional vehicle movements on access road to site dominant when present. Bird song/calls and aircraft.	Yes

<sup>\*</sup>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?

Site is fully compliant with WL. Tonal influence was measured at Station N4 for approx 1min at the 12,500Hz frequency. It was not audibly detected by the survey operator. This does not warrant a penalty. Cessation of landfilling activities accounts for reduction in noise levels.

Resource Usage/Energy efficiency summary Lic No: W0068-03 2012 Year

1 When did the site carry out the most recent energy efficiency audit? Please list the recommendations in table 3 below

SEAI - Large Industry Energy

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 Network (LIEN) Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in

additional information

	Additional information
no	
SELECT	N/A

Table R1 Energy usag	e on site			
Energy Use	Previous year	Current year	compared to previous reporting	Energy Consumption +/- % vs overall site production*
Total Energy Used (MWHrs)	101.504		,	
Total Energy Generated (MWHrs)	0	0		
Total Renewable Energy Generated (N	0	0		
Electricity Consumption (MWHrs)	101.504	166.686	39%	
Fossil Fuels Consumption:				
Heavy Fuel Oil (m3)	2	0.25	-87.50%	
Light Fuel Oil (m3)	200	20	-90%	
Natural gas (CMN)	0	0	0	
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				Water Emissions	Water Consumption			
	Water extracted			Energy Consumption +/- % vs overall site	Volume Discharged back to	Volume used i.e not discharged to environment e.g. released as steam		
Water use	Previous year m3/yr.	Current year m3/yr.	year**	production*	environment(m <sup>3</sup> yr):	m3/yr	Unaccounted for Water:	
Groundwater								
Surface water								
Public supply	220	214	-3	N/A	214	N/A		0
Recycled water								٦
Total	220	214	-3		214			]

\* 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					
	Total	Landfill	Incineration	Recycled	Other
Hazardous (Tonnes)	0				
Non-Hazardous (Tonnes)	0				

source	e Usage/Energy efficiency sum		Lic No:	W0068-03		Year	2012		
	Table R4: Energy Audit finding recommendations								
•	Date of audit		Description of Measures proposed		Predicted energy savings %	Implementation date	Responsibility		Status and comments
				SELECT					
				SELECT					
				SELECT					

	y)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:	W0068-03	Year	2012	
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	Yes					

	2 1:-		1				
Table 1	Complaints summary	T	D : ( ) (		1		1
			Brief description of complaint (Free txt <20	Corrective action< 20			Further
D-4-	C-1		words)		Resolution status	Danaliskia a daka	information
Date	Category	Other type (please specify)	words)	words	Resolution status	Resolution date	information
				Gas wells drained of			
20/04/2042	0.1			leachate. Improved		24 /04 /2042	
30/01/2012	Odour		Odour at Industrial Park	effective length Gas wells drained of	Complete	31/01/2012	
				leachate. Improved		/ /	
12/07/2012	Odour		Odour at Residence		Complete	15/07/2012	
				Gas wells drained of			
00/40/2042	0.1		01 10 11	leachate. Improved		40/40/2042	
08/10/2012	Odour		Odour at Residence	effective length	Complete	10/10/2012	
				Gas wells drained of			
/ /				leachate. Improved			
09/10/2012			Odour at Residence	effective length	Complete	10/10/2012	
	SELECT				SELECT		
Total complaints							
open at start of							
reporting year	0	)					
Total new							
complaints							
received during							
reporting year	4	1					
Total complaints							
closed during							
reporting year	4	1					
Balance of							
complaints end of							
reporting year	0	)					

Incidents		
	Additio	onal informat
Have any incidents occurred on site in the current reporting year? Please list all incidents	. •	
year in Table 2 below	No	
*For information on how to report and what		

Table 2 Incidents sur	nmary		]											
						Other	Activity in				Preventative			
			Incident category*please			cause(please	progress at			Corrective action<20	action <20		Resolution	Liklihood of
Date of occurrence	Incident nature	Location of occurrence	refer to guidance	Receptor	Cause of incident	specify)	time of incident	Communication	Occurrence	words	words	Resolution status	date	reoccurence
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
Total number of														

	SELECT	
Total number of		
incidents current		
year		(
Total number of		
incidents previous		
year		
% reduction/		
increase	100% Reduction	

WASTE SUMMARY	Lic No:	W0068-03	Year	2012	
SECTION A-DRIP ON SITE WASTE TREATMENT AND WASTE TRANSFERS TAR. TO BE COMPLETED BY ALL ID	DOC AND WASTE EACH ITIES	DRTP facility logge	drandown	list slick to see entions	

		RELEASES TO AIR			Please enter all quantities in this se	ection in KGs				
	POLLUTANT		METHOD		QUANTITY					
			M	ethod 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		
				Measured through						
				analysis of flare flue gas emissions						
)1	Methane (CH4)	M	MAB	monitoring	0.	0 25.	0.0	25.		
				Measured through						
				analysis of flare flue						
03	Carbon dioxide (CO2)	М	ISO 12039:2001	gas emissions monitoring	0.	0 119551.	0.0	119551.0		
	carbon dickade (662)			Measured through	0.		0			
				analysis of flare flue						
)2	Carbon monoxide (CO)	М	ISO 12039:2001	gas emissions monitoring	0.	0 37.	9 0.0	37.		
12	Carbon monoxide (CO)	IVI	130 12039.2001	Measured through	0.	0 37.	9 0.0	37.3		
				analysis of flare flue						
_			EN 400 40 0004	gas emissions						
)7	Non-methane volatile organic com	М	EN 13649:2001	monitoring Measured through	0.	0 0.	0.0	0.0		
				analysis of flare flue						
				gas emissions						
18	Nitrogen oxides (NOx/NO2)	M	EN 14792:2005	monitoring	0.	0 54.	0.0	54.0		
				Measured through analysis of flare flue						
				gas emissions						
1	Sulphur oxides (SOx/SO2)	M	EN 14791:2005	monitoring	0.	0 791.	3 0.0	791.3		

<sup>\*</sup> 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 see	ction in KGs		
P	POLLUTANT				QUANTITY			
			Method Used					
						T (Total)	A (Accidental)	
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	KG/Year	KG/Year	F (Fugitive) KG/Year
					0.0	0	0 0	0 00

<sup>\*</sup> 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)

020110110110111	to . ozzomiti zimoonomo (mo	roquirou in your Elouriou,		_					
		RELEASES TO AIR	Please enter all quantities in this section in KGs						
P	OLLUTANT	METHOD			QUANTITY				
			Meth	od Used					
						T (Total)	A (Accidental)		
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	KG/Year	KG/Year	F (Fugitive) KG/Year	
					0.1	1	0.0	0.0	

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

Landfill: Please enter	Youghal Landfill		•		_	
summary data on the quantities of methane flared and / or utilised			Meth	od Used		
				Designation or		
	T (Total) kg/Year	M/C/E	Method Code	Description	Facility Total Capacity m3 per hour	
Total estimated						
methane generation	1239845.0	_		GasSim Model	N/A	
(as per site model)	1239845.0	С	MAB	Measured through	N/A	ı
				analysis of flare flue		
				gas emissions		
Methane flared		M	MAB	monitoring		(Total Flaring Capacity
lethane utilised in engine/s	0.0				0.0	(Total Utilising Capacit
				Measured through		
Net methane emission				analysis of flare flue gas emissions		
(as reported in Section				monitoring and		
A above)	25.0	M	MAB	GasSim Model	N/A	

 WASTE SUMMARY
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				Quantity (Tonnes per Year)			М	ethod Used		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)
Transfer D	Destination	European Waste Code	Hazardous		Description of Waste	Waste Treatment Operation	M/C/E	Method Used	Location of Treatment				
Within the Co	Country	15 01 01	No		paper and cardboard packaging	R3	м	Weighed	Offsite in Ireland	Greenstar Ltd,W0136-01	Sarsfield Court Industrial Estate,Glanmire, Cork,.,Ireland		
Within the Co	Country	15 01 02	No	20.0	plastic packaging	R5	М	Weighed	Offsite in Ireland	Green Dragon Recycling,CK/09/0629/01	Corbally North,Glanmire, Cork,.,Ireland		
Within the Co	Country	15 01 04	No	2.0	metallic packaging	R4	М	Weighed	Offsite in Ireland	Green Dragon Recycling,CK/09/0629/01	Corbally North,Glanmire, Cork,.,Ireland		
Within the Co	Country	15 01 07	No	44.0	glass packaging	R5	М	Weighed	Offsite in Ireland	Mr. Binman,W0061-01	Luddenmore,Gra nge,Kilmalock,Co Limerick,Ireland		
Within the C	Country	16 06 01	Yes	2.0	lead batteries	R4	М	Weighed	Offsite in Ireland	KMK Metals Ltd,W0133-03	Cappinacur Industrial Estate,Tullamore ,Co	Ltd,W0133- 03,Cappincur Industrial	Cappincur Industrial Estate,Tullamore,C o Offlay,,,Ireland
Within the Co	Country	19 07 03	No		landfill leachate other than those mentioned in 19 07 02	D8	М	Weighed	Offsite in Ireland	Cork County Council,.	Treatment Plant,Tullagreen, Carrigtohill ,Co Cork,Ireland		
Within the Co	Country	20 01 01	No	93.0	paper and cardboard	R3	М	Weighed	Offsite in Ireland	Greenstar Ltd,W0136-01	Sarsfield Court Industrial Estate, Glanmire, Cork, ,, Ireland 41-42 Cookstown Industrial		
Within the Co	Country	20 01 02	No	6.0	glass	RS	М	Weighed	Offsite in Ireland	MSM Recycling,W0079-01	Estate,Tallaght,D ublin,D 24,Ireland		
Within the Co	Country	20 01 11	No	7.0	textiles	R5	М	Weighed	Offsite in Ireland	Textile Recycling Ltd,WCP-DC- 08-1225-01	Glen Abbey Business Park,Tallaght,Du blin,D24,Ireland		
Within the Co	Country	13 02 05	Yes		mineral-based non- chlorinated engine, gear and lubricating oils	R9	М	Weighed	Offsite in Ireland	Enva Ltd, W0184-01	Industrial Estate,Portlaoise ,Co Laois,,,Ireland Clonminam	Industrial Estate,Portlaoise, Co Laois,.,Ireland Enva Ltd,W0184-	Clonminam Industrial Estate,Portlaoise,C o Laois,,,Ireland
Within the Co	Country	20 01 27	Yes		paint, inks, adhesives and resins containing dangerous substances	R1	М	Weighed	Offsite in Ireland	Enva Ltd,W0184-01	Estate,Portlaoise ,Co	Industrial	Industrial Estate,Portlaoise,C

ASTE SUMMAR	Y			Lic No:	W0068-03		Year	2012	
			discarded electrical and						Cappinacur
			electronic equipment						Industrial
			other than those						Estate,Tullamore
			mentioned in 20 01 21,						,Co
ithin the Country	20 01 36	No	0.0 20 01 23 and 20 01 35	R4	М	Weighed	Offsite in Ireland	KMK Metals Ltd,W0133-03	Offlay,.,Ireland
									Rostellan, Midlet
			wood other than that					CTO Environmental Solutions	on,Co
ithin the Country	20 01 38	No	77.0 mentioned in 20 01 37	R13	M	Weighed	Offsite in Ireland	Ltd,CK/09/0068/02	Cork,.,Ireland
									Pouladuff
								Pouladuff Dismantlers Ltd,CK(S)	Road,Togher,Cor
ithin the Country	20 01 40	No	43.0 metals	R4	M	Weighed	Offsite in Ireland	478/07	k ,.,Ireland
									Kilberry,Athy,Co
title to the Occupant	00.00.04	No	CAO biodomidable conte	P2		Material	Official to tools and	D	Kildare,Kildare,Ir
ithin the Country	20 02 01	No	64.0 biodegradable waste	K3	M	Weighed	Offsite in Ireland	Bord na Mona,W0198-01	eland

	·	20 01 36 20 01 38	No No		wood other than that 0 mentioned in 20 01 37	R13	м	Weighed	Offsite in Ireland Offsite in Ireland	KMK Metals Ltd,W0133-03 CTO Environmental Solutions Ltd,CK/09/0068/02 Pouladuff Dismantlers Ltd,CK(S)	Offlay,.,ireland Rostellan,Midlet on,Co Cork,.,ireland Pouladuff Road,Togher,Cor	
		20 01 40 20 02 01	No		0 metals 0 biodegradable waste	R4	м	Weighed Weighed	Offsite in Ireland Offsite in Ireland	478/07 Bord na Mona,W0198-01	k ,.,Ireland Kilberry,Athy,Co Kildare,Kildare,Ir eland	
	SECTION B- WASTE	ACCEPTED ONTO SITE-TO	BE COMPLETED BY ALL IPP	PC AND WASTE FACI	LITIES		]	Additional Information	00			
Were any wastes <u>accepted onto</u> your site for recovery or disposal or treatment prior to recovery or disposal within the boundaries of your facility?; (waste generated within your  1 boundaries is to be captured through PRTR reporting)  If yes please enter details in table 1 below  Additional information No												
3	Was wast	te accepted onto your site that wa	s generated outside the Republic o your site for recovery, o Source of waste accepted	f Ireland? If yes please sta	ite the quantity in tonnes i		No No r site, as the	ese will have be	een reported in yo	our PRTR workbook)  Disposal/Recovery or	L Quantity of	Comments
	tonnage limit for your site (total tonnes/annum)	European Waste Catalogue EWCcodes	Source of waste accepted	Description of Waste accepted Please enter an accurate and detailed description - which European Waste Catalogue EWC codes	accepted in current reporting year (tonnes)	Quantity or waste accepted in previous reporting year (tonnes)	ease over previous year +/-%	reduction/increase from previous reporting year	only applies if the waste has a packaging component	Disposal/Recovery or treatment operation carried out at your site and the description of this operation	Quantity of waste remaining on site at the end of reporting year (tonnes)	Comments -
	SECTION C-TO BE C	OMPLETED BY ALL WASTE	FACILITIES (waste transfer	r stations, Composte	ers, Material recove	ry facilities etc) EXCEPT LANDF	LL SITES			l	<b>T</b>	
			ence and approved by the Agency in p				SELECT SELECT SELECT					
6	Does your facility have re	levant nuisance controls in place? anagement system in place for you		nace. If the prease list was	ac storage minostructure re	Agorea ori site	SELECT SELECT SELECT				<u></u>	

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# SECTION D-TO BE COMPLETED BY LANDFILL SITES ONLY

Table 2 Waste type and tonnage-landfill only

Waste types permitted	Authorised/licenced annual intake	Actual intake for disposal in	Remaining licensed capacity at end of	
for disposal  Household & Commercial	for disposal (tpa)	reporting year (tpa)	reporting year (m3)	Void Area is almost completely filled. Waste has ceased to be accepted but management of Cork County Council have yet to decide when to fill the remaining void.
Industrial non-haz	27,000	0	200	
Construction&Demoliti on Waste	5,300	1,575		

## Table 3 General information-Landfill only

Are	a 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?	Assented ashestes in venewting	area occupied by	Lined disposal area occupied by waste	Unlined area	Comments on liner type
											m2	SELECT UNIT	SELECT UNIT	
														HDPE 1mm liner with geo-textile layer and 0.5m gravel protection
Cell 9		Dec-08	Temporary Cease Feb 2012	Yes	Public	Non Hazardous	2013	No	No	No	120	120	0	layer

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

Table 4 Environmen	Table 4 Environmental monitoring-landfill Oni Landfill Manual-Monitoring Standards								
Was meterological									
monitoring in						Was	Has the statement		
compliance with			Was SW monitored in			topography of	under S53(A)(5) of		
Landfill Directive (LD)	Was leachate monitored in	Was Landfill Gas monitored in	compliance with LD			the site	WMA been		
standard in reporting	compliance with LD standard in	compliance with LD standard in	standard in reporting	Have GW trigger levels	Were emission limit values agreed with	surveyed in	submitted in		
year +	reporting year	reporting year	year	been established	the Agency (ELVs)	reporting year	reporting year	Comments	
								All license conditions	
								being met under	
								current monitoring	
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	regime	

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

Table 5 Capping-Landfill only

	Area uncapped*	Area with temporary cap	Area with final cap to LD		Area with waste that should be permanently capped to date under		
	m2	m2	Standard m2 ha, a	Area capped other	licence	What materials are used in the cap	Comments
Γ						1mm HDPE welded liner, geotextile	
ı						drainage layer and protection barrier	
ı						covered with 1m of suitable, screened	
L	0	17,000 square metres	81,800 square metres	0	0	soil.	

\*please note this includes daily cover area **Table 6 Leachate-Landfill only** 

9 Is leachate from your site treated in a Waste Water Treatment Plant?

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



Volume of leachate in	Leachate (BOD) mass load	Leachate (COD) mass load	Leachate (NH4) mass	Leachate (Chloride)		Specify type of leachate	
reporting year(m3)	(kg/annum)	(kg/annum)	load (kg/annum)	mass load kg/annum	Leachate treatment on-site	treatment	Comments
						Wastewater	
						Treatment	
						Plant with	
						Mixing tank,	
						Oxidation ditch	
						& Settlement	
5325.25	1093.03	10565.99	10407.24	19768.29	No	tanks	

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

Table 7 Landfill Gas-Landfill only

Gas Captured&Treated by LFG System m3	Power generated (MW / KWh)	Used on-site or to national grid	Was surface emissions monitoring performed during the reporting year?	Comments
				Gas captured figure is
				Annual Methane burn-
				off in kg/annum. Areas
				of elevated VOC's are
				identified by the
				surveys and are attended to by site
				staff. Well heads and
				flanked areas are
				repaired to improve
				gas system coverage at
1527259 kg CH4/Annum	0	0	Yes	the site.