Facility Information Summary			_	
AER Reporting Year	2015			
Licence Register Number	W0026-03			
Name of site		Kyletalesh	ha Landfill	
Site Location	Mou	ntmellick R	Road, Portlaoise	
NACE Code				
Class/Classes of Activity	Landfi	ill for Non-H	Hazardous Waste	
National Grid Reference (6E, 6 N)		245403,	, 202646	

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.

Landfilling activities ceased on site in November 2012 and completion of capping works on the final section of mini-cell 15b was completed in March 2013. Despite the closed status of the site limited household waste volumes are still accepted at the domestic waste deposit area for offsite transfer and disposal by a licensed contractor. All environmental monitoring was completed as required under schedule D of the waste licence. Groundwater, landfill gas, flare stack emissions, dust deposition, leachate and surface water monitoring results for 2015 were consistent with previous historical results.

Declaration:

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

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

AIR-summary	•				Lic No:	W0026-03		Year	2015	5
Answer all questi	ions and complete all table	s where relevant					Additional informati			
							Additional informati	on	1	
Does your site	have licensed air emission	ns? If yes please co	mplete table A1 ar	nd A2 below for the current						
reporting year	and answer further quest	ions. If you do not h	ave licenced emis	sions and do not complete a						
solv	vent management plan (ta	able A4 and A5) you	do not need to co	mplete the tables			UNIFLARE 750m3			
					Yes		Flare]	
Period	lic/Non-Continuous M	1onitoring								
	h · 1 / 61·									
Are there any res	suits in breach of licence rec	TableA1 below		etails in the comment section of	No					
		Tuble (1 below			110				1	
Was all monitori	ing carried out in accordanc	e with EPA guidance	Basic air monitoring							
	nd using the basic air monit		checklist	AGN2	Yes					
	ů .								•	
Table A1: Lice	ensed Mass Emissions	s/Ambient data-p	eriodic monito	ring (non-continuous)						
										Comments -
										reason for
										change in %
										mass load
			FIV:= l:=======							from
Emission		Frequency of	ELV in licence or any revision			Unit of	Compliant with		Annual mass	previous year if
reference no:	Parameter/ Substance	Monitoring	therof	Licence Compliance criteria	Measured value	measurement	licence limit	Method of analysis	load (kg)	applicable
				No 30min mean can exceed	3.81			,	1 0	.,
UNIFLARE	Carbon monoxide (CO)	Annual	50 mg/Nm3	the ELV		mg/Nm3	yes	EN15058:2006		
ONITEARE	carbon monoxide (co)	Allitual	50 mg/mm3		121.86		yes	EN13038.2000		
	Nitrous oxide (N2O)	Annual	150 mg/Nm3	No 30min mean can exceed the ELV		/n. a		EN14792:2006		
		Annuai	150 mg/Nm3		0.59	mg/Nm3	yes	EN14792:2006		
	Total Volatile Organic			No 30min mean can exceed						
	Carbon (VOC)	Annual	10 mg/Nm3	the ELV	0.41	mgC/Nm3	yes	EN12619:2013	 	-
				No 30min mean can exceed	0.41					
	Hydrogen Chloride (HCL)	Annual	50 mg/Nm3	the ELV	101	mg/Nm3	yes	EN1911:2010		
•				No 30min mean can exceed	1.64	•				
	Hydrogen Fluoride (HF)	Annual	5 mg/Nm3	the ELV		mg/Nm3	yes	EN15713:2006		
1		1	1	No 30min mean can exceed	72.1					
	Sulpher Dioxide (SO2)	Annual	N/A	the ELV		mg/Nm3	N/A	TGN21		
		1	1	No 30min mean can exceed	11.6					
	Oxygen	Annual	N/A	the ELV		mg/Nm3	N/A	EN14789:2005		
	SELECT			SELECT		SELECT	SELECT			
Note 1: Volumetr	ric flow shall be included as	a reportable paramet	er							
										Comments -
										reason for
										change in %
										mass load
			5077							from
Emission		Eroguanov of	ELV in licence or any revision			Unit of	Compliant with		Annual mass	previous year if
reference no:	Parameter/ Substance	Frequency of Monitoring	therof	Licence Compliance criteria	Measured value	measurement	licence limit	Method of analysis	load (kg)	applicable
		J J	50 mg/m²/day		45.9,7.84, 54.9			3		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
D1	Dust Deposition	3 Times a Year		Daily average < ELV		mg/m²/day	yes	ОТН	N/A	N/A
D2	Dust Deposition	3 Times a Year	50 mg/m²/day	Daily average < ELV	149.1, 389.01, 25.		yes	OTH	N/A	N/A
D3	Dust Deposition	3 Times a Year	50 mg/m²/day	Daily average < ELV	73.2, 2.74, 37.6	mg/m²/day	yes	OTH	N/A	N/A
υ4	Dust Deposition	3 Times a Year	50 mg/m²/day	Daily average < ELV	75.5,3.92, 74.1	mg/m²/day	yes	OTH	N/A	N/A

	AIR-summary template	Lic No:	W0026-03	Year	2015
	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 A2 and compare it to its relevant Emission Limit Value (ELV)				
5	Did continuous monitoring equipment experience downtime? If yes please record downtime in table A2 below	No			
6	Do you have a proactive service agreement for each piece of continuous monitoring equipment?	Yes			
7	Did your site experience any abatement system bypasses? If yes please detail them in table A3 below	No			

Table A2: Summary of average emissions -continuous monitoring

Emission	Parameter/ Substance		Averaging Period	Compliance Criteria	Units of	Annual Emission	Annual maximum	Monitoring	Number of ELV	Comments
reference no:					measurement			Equipment	exceedences in	
								downtime (hours)	current	
		ELV in licence or							reporting year	
		any revision therof								
		1.0% v/v	Daily			N/A	0%	C	0	Less than
										ELV for all
Site Office	CH4			Daily average < ELV	%v/v					readings
		1.5% v/v	Daily			N/A	0%	C	0	Less than
										ELV for all
Site Office	CO2			Daily average < ELV	%v/v					readings
		1.0% v/v	Daily			N/A	0%	C	0	Less than
										ELV for all
Weighbridge	CH4			Daily average < ELV	%v/v					readings
		1.5% v/v	Daily			N/A	0%	C	0	Less than
										ELV for all
Weighbridge	CO2			Daily average < ELV	%v/v					readings
		1.0% v/v	Daily			N/A	0%	C	0	Less than
										ELV for all
CA Site Office	CH4			Daily average < ELV	%v/v					readings
		1.5% v/v	Daily			N/A	0%	C	0	Less than
										ELV for all
CA Site Office	CO2			Daily average < ELV	%v/v					readings

CA Site Office CO2

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

Table A3: Abatement system bypass reporting table Bypass protocol

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

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

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

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AIR-summar	template				Lic No:	W0026-03		Year	2015
Solve	nt use and manageme	nt on site							
Do you have a to	tal Emission Limit Value of d	irect and fugitive emis	ssions on site? if ye	s please fill out tables A4 and A5			NI-		
Table A4: Sol	vent Management Pla	an Summary	Solvent	Please refer to linked solven	t regulations to	7	No		
	nission limit value	•	<u>regulations</u>	complete table 5	and 6				
Reporting year	Total solvent input on	Total VOC	Total VOC		Compliance	1			
.,	site (kg)	emissions to Air	emissions as %of						
		from entire site (direct and fugitive)	solvent input	Total Emission Limit Value (ELV) in licence or any revision					
				therof					
					SELECT				
					SELECT	1			
Table As	5: Solvent Mass Baland	ce summary							1
	(I) Inputs (kg)			(O)	Outputs (kg)				
Solvent		Organic solvent	Solvents lost in	Collected waste solvent (kg)	Fugitive Organic	Solvent released	Solvents destroyed	Total emission of	
	(I) Inputs (kg)		water (kg)		Solvent (kg)	in other ways e.g.		Solvent to air (kg)	
							_		
	•	•					Total		

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER) Lic No: W0026-03 Year 2015

Does your site have licensed emissions direct to surface water or direct to sewer? If yes please

1 complete table W2 and W3 below for the current reporting year and answer further questions. If you
do not have licenced emissions you only need to complete table W1 and or W2 for storm water
analysis and visual inspections

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

	Additional information
No	Leachate is Tankered off site to Laois Co. Co. Waste Water Treatment Plant
	Schedule D.5
Yes	

Table W1 Storm water monitoring

10210 1110	orm water mo	mitoring								
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
S1	upstream	SELECT	Temperature	22/01/2015, 14/04/2015, 09/07/2015, 12/10/2015	Temperature shall exc	All values < ELV	1.8, 9.2, 13.5, 8.8	degrees C	yes	
	upstream	JEELET	Dissolved Oxygen	22/01/2015, 14/04/2015, 09/07/2015, 12/10/2015		All values < ELV	63.0, 62.0, 53.0, 67.0		(if no please enter details in comments l	stagnant nature of water would lend itself to reduced DO levels
			рН	22/01/2015, 14/04/2015, 09/07/2015, 12/10/2015	6.0-9.0	All values < ELV	7.6, 7.1, 7.2, 7.3	pH units	yes	
			Conductivity	22/01/2015, 14/04/2015, 09/07/2015, 12/10/2015	1000	All values < ELV	483,493, 674, 429	μS/cm @20oC	yes	
			Ammonia (as N)	22/01/2015, 14/04/2015, 09/07/2015, 12/10/2015	0.14	All values < ELV	1.3, 0.76, 2.3, 1.5	mg/L	(if no please enter details in comments t	Organics in peat result in elevated ammonia concentrations
			Chloride	22/01/2015, 14/04/2015, 09/07/2015, 12/10/2015	250	All values < ELV	nr, 18, 15, 14	mg/L	yes	
			Ortho-phosphate (as PO4)	14/04/2015,	0.06	All values < ELV	0.012	mg/L	yes	
			Total Oxidised Nitrogen	14/04/2015,	No abnormal Change	All values < ELV	0.83	mg/L	yes	
			COD	22/01/2015, 14/04/2015, 09/07/2015, 12/10/2015	40	All values < ELV	69, 83, 55, 45	mg/L		
			BOD	22/01/2015, 14/04/2015, 09/07/2015, 12/10/2015	2.6	All values < ELV	1.4, 2.2, 3.5, 2.7	mg/L	(if no please enter details in comments l	One result indicated elevated BOD - upstream of site
			Suspended Solids	22/01/2015, 14/04/2015, 09/07/2015, 12/10/2015	50	All values < ELV	<8, <8,<8, <4	mg/L	ves	
			Fluoride	14/04/2015,	0.5	All values < ELV	0.2	mg/L	yes	
			Sulphate	14/04/2015,	200	All values < ELV	2	mg/L	yes	
			Aluminium	14/04/2015,	200	All values < ELV	17	μg/L	yes	
			Barium	14/04/2015,	1000	All values < ELV	130	μg/L	yes	
			Calcium	14/04/2015,	N/A	All values < ELV	58	mg/L	yes	
			Cobalt	14/04/2015,	N/A 2000	All values < ELV	<1.0 820	μg/L	yes	
			Iron Magnesium	14/04/2015,	2000 N/A	All values < ELV All values < ELV	820 4	μg/L mg/L	yes yes	
			Manganese	14/04/2015,	1000	All values < ELV	460	mg/L μg/L	yes	
			Potassium	14/04/2015,	N/A	All values < ELV	2.3	mg/L	ves	
			Selenium	14/04/2015,	10	All values < ELV	<1.0	μg/L	yes	
			Sodium	14/04/2015,	200	All values < ELV	11	mg/L	yes	
			Antimony	14/04/2015,	5	All values < ELV	<1.0	μg/L	yes	
	SELECT	SELECT	Total Heavy Metals	14/04/2015,	Various	All values < ELV	All < ELV	μg/L	yes	-
S4	downstream	SELECT	Temperature	22/01/2015, 14/04/2015, 09/07/2015,	Temperature shall exc	All values < ELV	3.2, 9.4, -, -	degrees C	yes	
	COWINGCEALL	JEEECT		12/10/2015 22/01/2015, 14/04/2015, 09/07/2015,			85.0, 82.0, -, -			
			Dissolved Oxygen	12/10/2015	1	All values < ELV	I	mg/L	yes	•

Monitoring re	turns summary	template-WATER	/WASTEWATER(SEWI			Lic No:	W0026-03		Year	20
				22/01/2015, 14/04/2015,	6.0-9.0		, 7.4, -, -			
			pH	09/07/2015, 12/10/2015		All values < ELV		pH units	yes	
				22/01/2015, 14/04/2015, 09/07/2015,	1000		1212, 1194, -, -			May be due to runoff into stream from upstream sources
			Conductivity	12/10/2015 22/01/2015,		All values < ELV		μS/cm @20oC	(if no please enter details in comments	
			Ammonia (as N)	14/04/2015, 09/07/2015, 12/10/2015	0.14	All values < ELV	0.41. 0.15 , -, -	mg/L	(if no please enter details in comments	One result indicated elevated ammonia - n be due to influence from upstream sourc not associated with the site
			Chloride	22/01/2015, 14/04/2015, 09/07/2015,	250		97, 104,			
			Ortho-phosphate (as PO4)	12/10/2015 14/04/2015,	0.06	All values < ELV All values < ELV	0.038	mg/L	yes	
	_		Total Oxidised Nitrogen	14/04/2015,	No abnormal Change	All values < ELV	4.2	mg/L	yes	
	_		Total Oxidised Nitrogen	22/01/2015,	No abnormal Change	All values < ELV	4.2	mg/L	yes	
				14/04/2015, 09/07/2015,	40		88, 100, -, -			Elevated COD may be due to influence fro upstream sources not associated with the
			COD	12/10/2015		All values < ELV		mg/L	(if no please enter details in comments	(e.g., septic tanks)
				22/01/2015, 14/04/2015,	2.6		2.4, 1.9,			
			BOD	09/07/2015, 12/10/2015		All values < ELV		mg/L	yes	
				22/01/2015, 14/04/2015, 09/07/2015,	50		39, 11,			
			Suspended Solids	12/10/2015		All values < ELV		mg/L	yes	
			Fluoride	14/04/2015,	0.5	All values < ELV	<0.4	mg/L	yes	
			Sulphate	14/04/2015,	200	All values < ELV	47	mg/L	yes	
			Aluminium	14/04/2015,	200	All values < ELV	38	μg/L	yes	
			Barium	14/04/2015,	1000	All values < ELV	220	μg/L	yes	
			Calcium	14/04/2015, 14/04/2015,	N/A	All values < ELV	150	mg/L	yes	
			Cobalt		N/A 2000	All values < ELV	<1.0	μg/L	yes	
			Iron	14/04/2015, 14/04/2015,	N/A	All values < ELV All values < ELV	550 32	μg/L	yes	
			Magnesium Manganese	14/04/2015,	1000	All values < ELV	63	mg/L μg/L	yes yes	
			Potassium	14/04/2015,	N/A	All values < ELV	18	mg/L	yes	
			Selenium	14/04/2015,	10	All values < ELV	<1.0	μg/L	yes	
			Sodium	14/04/2015,	200	All values < ELV	73	mg/L	yes	
			Antimony	14/04/2015,	5	All values < ELV	<1.0	μg/L	yes	
	SELECT	SELECT	Total Heavy Metals	14/04/2015,	Various	All values < ELV	All < ELV	μg/L	yes	
S3	downstream	SELECT	Temperature	22/01/2015, 14/04/2015, 09/07/2015,	Temperature shall exc	All values < ELV	3., 9.5, -, -	degrees C	yes	
	downstream	SELECT	Dissolved Oxygen	22/01/2015, 14/04/2015, 09/07/2015,		All values < ELV	74.0, 30.0, -, -	mg/L	(if no please enter details in comments	stagnant nature of water would lend itsel reduced DO levels
			рН	22/01/2015, 14/04/2015, 09/07/2015,	6.0-9.0	All values < ELV	7.3, 7.2, -, -	pH units	yes	
	-		Conductivity	22/01/2015, 22/01/2015, 14/04/2015, 09/07/2015,	1000	All values < ELV	830, 946, -, -	μS/cm @20oC	yes	
				22/01/2015, 14/04/2015,	0.14		14, 17, -, -			Breakdown of organics in bog contributing elelvated concentrations
				09/07/2015.				mg/L	(if no please enter details in comments	
			Ammonia (as N)	22/01/2015, 14/04/2015,	250	All values < ELV	n/r, 81,			
			Chloride	22/01/2015, 14/04/2015, 09/07/2015,		All values < ELV		mg/L	yes	
			Chloride Ortho-phosphate (as PO4)	22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015	0.06	All values < ELV All values < ELV	0.015	mg/L	yes	
			Chloride	22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015 14/04/2015		All values < ELV				
			Chloride Ortho-phosphate (as PO4)	22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015	0.06	All values < ELV All values < ELV	0.015	mg/L	yes	Elevated concentrations similar to backgro
			Chloride Ortho-phosphate (as PO4) Total Oxidised Nitrogen	22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015 14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 22/01/2015, 14/04/2015, 09/07/2015,	0.06 No abnormal Change	All values < ELV All values < ELV All values < ELV	0.015 1.8	mg/L mg/L	yes yes	
			Chloride Ortho-phosphate (as PO4) Total Oxidised Nitrogen COD	22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015 14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 22/01/2015, 14/04/2015, 09/07/2015, 22/01/2015, 14/04/2015,	0.06 No abnormal Change 40	All values < ELV All values < ELV All values < ELV All values < ELV	0.015 1.8 82, 96, -, -	mg/L mg/L mg/L	yes yes (if no please enter details in comments	Breakdown of organics in bog contributin
			Chloride Ortho-phosphate (as PO4) Total Oxidised Nitrogen COD BOD	22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015 14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 22/01/2015, 14/04/2015, 09/07/2015, 22/01/2015,	0.06 No abnormal Change 40 2.6	All values < ELV	0.015 1.8 82, 96, -, -	mg/L mg/L mg/L	yes yes (If no please enter details in comments (If no please enter details in comments	Breakdown of organics in bog contributin
			Chloride Ortho-phosphate (as PO4) Total Oxidised Nitrogen COD BOD Suspended Solids	22/01/2015, 14/04/2015, 14/04/2015 14/04/2015 14/04/2015 22/01/2015, 22/01/2015, 22/01/2015, 22/01/2015, 22/01/2015, 22/01/2015, 22/01/2015, 22/01/2015, 22/01/2015, 29/07/2015, 29/07/2015,	0.06 No abnormal Change 40 2.6 50 0.5 200	All values < ELV	0.015 1.8 82, 96, -, - 4.9, 12, -, -	mg/L mg/L mg/L mg/L mg/L	yes yes (If no please enter details in comments (If no please enter details in comments yes	Breakdown of organics in bog contributin
			Chloride Ortho-phosphate (as PO4) Total Oxidised Nitrogen COD BOD Suspended Solids Fluoride	22/01/2015, 14/04/2015, 14/04/2015, 14/04/2015 14/04/2015 14/04/2015, 14/04/2015, 14/04/2015, 14/04/2015, 14/04/2015, 14/04/2015, 14/04/2015, 14/04/2015, 14/04/2015, 14/04/2015, 14/04/2015,	0.06 No abnormal Change 40 2.6 50 0.5 200 N/A	All values < ELV	0.015 1.8 82, 96, -, - 4.9, 12, -, - 12, <8, -, - <0.20 8 14	mg/L mg/L mg/L mg/L mg/L mg/L	yes yes (if no please enter details in comments (if no please enter details in comments yes yes	Breakdown of organics in bog contributin
			Chloride Ortho-phosphate (as PO4) Total Oxidised Nitrogen COD BOD Suspended Solids Fluoride Sulphate Aluminium Barium	22/01/2015, 09/07/2015, 09/07/2015, 14/04/2015 14/04/2015 14/04/2015, 14/04/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 14/04/2015 14/04/2015 14/04/2015	0.06 No abnormal Change 40 2.6 50 0.5 200 N/A 1000	All values < ELV	0.015 1.8 82, 96, -, - 4.9, 12, -, - 12, <8, -, - <0.20 8 14 170	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	yes yes Yes (If no please enter details in comments (If no please enter details in comments yes yes yes yes yes yes yes	Breakdown of organics in bog contributin
			Chloride Ortho-phosphate (as PO4) Total Oxidised Nitrogen COD BOD Suspended Solids Fluoride Sulphate Aluminium Barium Calcium	22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015 14/04/2015 14/04/2015 14/04/2015, 09/07/2015, 14/04/2015, 14/04/2015, 14/04/2015, 14/04/2015 14/04/2015 14/04/2015 14/04/2015	0.06 No abnormal Change 40 2.6 50 0.5 200 N/A 1000 N/A	All values < ELV	0.015 1.8 82, 96, -, - 4.9, 12, -, - 12, <8, -, - <0.20 8 14 170 89	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	yes yes yes (if no please enter details in comments (if no please enter details in comments yes yes yes yes yes yes yes	Breakdown of organics in bog contributing
			Chloride Ortho-phosphate (as PO4) Total Oxidised Nitrogen COD BOD Suspended Solids Fluoride Sulphate Aluminium Barium Calcium Cobalt	22/01/2015, 09/07/2015, 09/07/2015, 14/04/2015 14/04/2015 14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015	0.06 No abnormal Change 40 2.6 50 0.5 200 N/A 1000 N/A N/A	All values < ELV	0.015 1.8 82, 96, -, - 4.9, 12, -, - 12, <8, -, - <0.20 8 14 170 89 1.1.	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	yes yes yes (if no please enter details in comments (if no please enter details in comments yes yes yes yes yes yes yes y	Breakdown of organics in bog contributing
			Chloride Ortho-phosphate (as PO4) Total Oxidised Nitrogen COD BOD Suspended Solids Fluoride Sulphate Aluminium Barium Calcium Cobalt Iron	22/01/2015, 09/07/2015, 09/07/2015, 14/04/2015 14/04/2015 12/01/2015, 14/04/2015 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015	0.06 No abnormal Change 40 2.6 50 0.5 200 N/A 1000 N/A N/A 2000	All values < ELV	0.015 1.8 82, 96, -, - 4.9, 12, -, - 12, <8, -, - <0.20 8 14 170 89 1.1. 1100	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	yes yes yes (If no please enter details in comments (If no please enter details in comments yes yes yes yes yes yes yes y	Elevated concentrations similar to backgro Breakdown of organics in bog contributing elelvated concentrations
			Chloride Ortho-phosphate (as PO4) Total Oxidised Nitrogen COD BOD Suspended Solids Fluoride Sulphate Aluminium Barium Calcium Cobalt	22/01/2015, 09/07/2015, 09/07/2015, 14/04/2015 14/04/2015 14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015	0.06 No abnormal Change 40 2.6 50 0.5 200 N/A 1000 N/A N/A	All values < ELV	0.015 1.8 82, 96, -, - 4.9, 12, -, - 12, <8, -, - <0.20 8 14 170 89 1.1.	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	yes yes yes (if no please enter details in comments (if no please enter details in comments yes yes yes yes yes yes yes y	Breakdown of organics in bog contribut

R Monitoring ret	turns summary	template-WATE	R/WASTEWATER(SEWI	:K)		Lic No:	W0026-03		Year	20:
			Manganese	14/04/2015	1000	All values < ELV	420	μg/L	yes	
			Potassium	14/04/2015	N/A	All values < ELV	20	mg/L	yes	
			Selenium	14/04/2015	10	All values < ELV	<1.0	μg/L	yes	
			Sodium	14/04/2015	200	All values < ELV	63	mg/L	yes	
			Antimony	14/04/2015	5	All values < ELV	<1.0	μg/L	yes	
	SELECT	SELECT	Total Heavy Metals	14/04/2015	Various	All values < ELV	All < ELV	μg/L	yes	
S2	onsite	SELECT	Temperature	22/01/2015, 14/04/2015, 09/07/2015,	Temperature shall exc	All values < ELV	2.4, 9.5, 13.8, 8.7	degrees C	yes	
			Dissolved Oxygen	22/01/2015, 14/04/2015,		All values < ELV	65.0, 61.0, 26.0, 75.0	mg/l	(if no please enter details in comments	stagnant nature of water would lend itself reduced DO levels
			pH	09/07/2015, 22/01/2015, 14/04/2015, 09/07/2015,	6.0-9.0	All values < ELV	7.6, 7.1, 7.2, 7.2	mg/L pH units	yes	
			Conductivity	22/01/2015, 14/04/2015, 09/07/2015,	1000	All values < ELV	483, 493, 674, 544	μS/cm @20oC	yes	
			Ammonia (as N)	22/01/2015, 14/04/2015, 09/07/2015,	0.14	All values < ELV	4.9, 3.8, 7.3, 3.5	mg/L	(if no please enter details in comments	Breakdown of organics in bog & potential limited input from site contributing to elevated concentrations
			Chloride	22/01/2015, 14/04/2015, 09/07/2015,	250	All values < ELV	n/r, 29, 32, 23	mg/L	yes	
			Ortho-phosphate (as PO4)	14/04/2015	0.06	All values < ELV	0.018	mg/L	yes	
			Total Oxidised Nitrogen	14/04/2015	No abnormal Change	All values < ELV	2.3	mg/L	ves	
			COD	22/01/2015, 14/04/2015, 09/07/2015.	40	All values < ELV	159, 933, 178, 48	mg/L	(if no please enter details in comments	Elevated concentrations similar to backgrou (S1)
			BOD	22/01/2015, 14/04/2015, 09/07/2015,	2.6	All values < ELV	6, 40, 188, 315	mg/L	(if no please enter details in comments	Exceedance from organics breakdown
			Suspended Solids	22/01/2015, 14/04/2015, 09/07/2015.	50	All values < ELV	77, 113, 115, 5	mg/L	(if no please enter details in comments	Exceedences due to heavy rainfall.
			Fluoride	14/04/2015	0.5	All values < ELV	<0.20	mg/L	yes	
			Sulphate	14/04/2015	200	All values < ELV	7	mg/L	yes	
			Aluminium	14/04/2015	N/A	All values < ELV	19	μg/L	yes	
			Barium	14/04/2015	1000	All values < ELV	130	μg/L	yes	
			Calcium	14/04/2015	N/A	All values < ELV	72	mg/L	yes	
			Cobalt	14/04/2015	N/A	All values < ELV	<1.0	μg/L	yes	
			Iron	14/04/2015	2000	All values < ELV	740	μg/L	yes	
			Magnesium	14/04/2015	N/A	All values < ELV	8.1	mg/L	yes	
			Manganese	14/04/2015	1000	All values < ELV	210	μg/L	ves	
			Potassium	14/04/2015	N/A	All values < ELV	8.6	mg/L	ves	
			Selenium	14/04/2015	10	All values < ELV	<1.0	μg/L	yes	
			Sodium	14/04/2015	200	All values < ELV	20	mg/L	yes	
			Antimony	14/04/2015	5	All values < ELV	<1.0	μg/L	yes	
	SELECT	SELECT	Total Heavy Metals	14/04/2015	Various	All values < ELV	All < ELV	μg/L	yes	
\$5	onsite	SELECT	Temperature	22/01/2015, 14/04/2015, 09/07/2015.	Tmperature shall exce	All values < ELV	2.6, 10.5, 15.8, 9.4	degrees C	yes	
			Dissolved Oxygen	22/01/2015, 14/04/2015, 09/07/2015,		All values < ELV	45.0, 23.0, 39.0, 50.0	no	o (if no please enter details in comments	stagnant nature of water would lend itself reduced DO levels
			рН	22/01/2015, 14/04/2015, 09/07/2015,	6.0-9.0	All values < ELV	7.3, 7.2, 7.5, 7.4	pH units	yes	
			Conductivity	22/01/2015, 14/04/2015, 09/07/2015,	1000	All values < ELV	2100, 2730, 3050, 5320	μS/cm @20oC	(if no please enter details in comments	Elevated conductivity may be indicator o inputs to drain from site and othere commercial sites in the area.
			Ammonia (as N)	22/01/2015, 14/04/2015, 09/07/2015, 22/01/2015,	0.14	All values < ELV	50, 78, 83, 100	mg/L	(if no please enter details in comments	Organic input from site, forestry, roads, agriculture and commercial properties in t area.
			Chloride	14/04/2015, 09/07/2015,	250	All values < ELV	170, 277, 336, 353	mg/L	(if no please enter details in comments	box)
			Ortho-phosphate (as PO4)	14/04/2015	No abnormal Change	All values < ELV	0.013 0.52	mg/L	yes	
			Total Oxidised Nitrogen COD	14/04/2015 22/01/2015, 14/04/2015, 09/07/2015,	40	All values < ELV All values < ELV	109, 155, 126, 143	mg/L mg/L	yes (if no please enter details in comments	Elevated concentrations similar to backgro
			BOD	22/01/2015, 14/04/2015, 09/07/2015,	2.6	All values < ELV	20, 19, 6.3, 7.2	mg/L	(if no please enter details in comments	Organic input from site, forestry, roads, agriculture and commercial properties in t area.
			Suspended Solids	22/01/2015, 14/04/2015, 09/07/2015,	50	All values < ELV	99, 48, 80, 205	mg/L	(if no please enter details in comments	three instances of high S Solids may be due high rains or increased output from othe properties discharging to that area of the drain.
			Fluoride	14/04/2015	0.5	All values < ELV	<0.6	mg/L	yes	grain.
			Sulphate	14/04/2015	200	All values < ELV	8	mg/L	yes	1
			Julphate	24/04/2013	200	, an values < ELV		IIIg/ L	yes .	I .

	ns summary	template-WATER	/WASTEWATER(SEWI			Lic No:	W0026-03		Year	
			Aluminium	14/04/2015	N/A	All values < ELV	<10.0	μg/L	yes	
			Barium	14/04/2015	1000	All values < ELV	400	μg/L	yes	
			Calcium	14/04/2015	N/A	All values < ELV	150	mg/L	yes	
			Cobalt	14/04/2015	N/A	All values < ELV	2.3	μg/L	yes	
										digested sediment in sample during anal
			Iron	14/04/2015	2000	All values < ELV	3000		(if no please enter details in comments l	may indicate higher concentration
			Iron Magnesium	14/04/2015	N/A	All values < ELV	52	μg/L		
					1000		410	mg/L	yes	-
			Manganese	14/04/2015 14/04/2015		All values < ELV	62	μg/L	yes	-
			Potassium		N/A	All values < ELV		mg/L	yes	
			Selenium	14/04/2015	10	All values < ELV	<1.0	μg/L	yes	
			Sodium	14/04/2015	200	All values < ELV	N/R	mg/L	yes	
			Antimony	14/04/2015	5	All values < ELV	<1.0	μg/L	yes	
	SELECT	SELECT	Total Heavy Metals	14/04/2015	Various	All values < ELV	All < ELV	SELECT	yes	
S7				22/01/2015, 14/04/2015,	Temperature shall exc		3.5,10.3,12.7,9.8			1
3/	downstream	SELECT	Temperature	09/07/2015,	remperature shall exc	All values < ELV	3.5,10.3,12.7,9.6	degrees C	yes	1
	downstream	JEEC!	remperature	22/01/2015.		741 401003 4 224		degrees e	763	
				14/04/2015,			68.0,48.0,21.0,47.0			stagnant nature of water would lend its
			Dissolved Oxygen	09/07/2015,		All values < ELV		mg/L	(if no please enter details in comments b	reduced DO levels
				22/01/2015,						
				14/04/2015,	6.0-9.0		7.5,7.3,7.3,7.3			l
			pH	09/07/2015, 22/01/2015,		All values < ELV		pH units	yes	
				14/04/2015,	1000		743, 814, 1203, 1108			1
			Conductivity	09/07/2015,	1000	All values < ELV	743, 814, 1203, 1108	μS/cm @20oC	ves	1
			Conductivity	22/01/2015,		741 Values 4 EEV		μ5/cm @2000	763	Organic input from site, forestry, road
				14/04/2015,	0.14		7.4, 7.9, 13, 13			agriculture and commercial properties i
			Ammonia (as N)	09/07/2015,		All values < ELV		mg/L	(if no please enter details in comments b	area.
				22/01/2015,						1
			Chloride	14/04/2015,	250		n/r, 59, 88, 94	/		1
				09/07/2015, 14/04/2015	0.06	All values < ELV	0.040	mg/L	yes	+
			Ortho-phosphate (as PO4)		No abnormal Change	All values < ELV All values < ELV	0.016	mg/L	yes	
			Total Oxidised Nitrogen	14/04/2015	No abnormal Change	All values < ELV	3.8	mg/L	yes	
				22/01/2015, 14/04/2015,	40		87, 94, 63, 54			Elevated concentrations similar to backs
			COD	09/07/2015,	40	All values < ELV	07, 34, 03, 34	mg/L	(if no please enter details in comments b	Lievated Concentrations similar to backg
				22/01/2015,						Organic input from site, forestry, roa
				14/04/2015,	2.6		5.9, >22.5, 22, 4			agriculture and commercial properties i
			BOD	09/07/2015,		All values < ELV		mg/L	(if no please enter details in comments b	area.
				22/01/2015,						1
			Commended Callida	14/04/2015,	50	All column a FIN	<8, <8, 12, 5	/1		1
			Suspended Solids Fluoride	09/07/2015. 14/04/2015	0.5	All values < ELV All values < ELV	0.3	mg/L	yes	
			Sulphate	14/04/2015	200	All values < ELV	16	mg/L	yes	+
			Suipnate	14/04/2015	200 N/A	All values < ELV	36	mg/L	yes	
								μg/L	yes	
			Barium	14/04/2015	1000	All values < ELV	240	μg/L	yes	
			Calcium	14/04/2015	N/A	All values < ELV	110	mg/L	yes	
			Cobalt	14/04/2015	N/A	All values < ELV	<1.0	μg/L	yes	
			Iron	14/04/2015	2000	All values < ELV	810	μg/L	yes	
			Magnesium	14/04/2015	N/A	All values < ELV	14	mg/L	yes	
			Manganese	14/04/2015	1000	All values < ELV	140	μg/L	yes	
			Potassium	14/04/2015	N/A	All values < ELV	14	mg/L	yes	ļ
			Selenium	14/04/2015	10	All values < ELV	<1.0	μg/L	yes	
			Sodium	14/04/2015	200	All values < ELV	42	mg/L	yes	
			Antimony	14/04/2015	5	All values < ELV	<1.0	μg/L	yes	
	SELECT	SELECT	Total Heavy Metals	14/04/2015	Various	All values < ELV	All < ELV	μg/L	yes	
				22/01/2015,						l
S8				14/04/2015,	Temperature shall exc		5.7,11.5,14.5,12.5			1
	upstream	SELECT	Temperature	09/07/2015,		All values < ELV		degrees C	yes	
				22/01/2015, 14/04/2015,			101.0,112.0,96.0,112.0			1
			Dissolved Oxygen	09/07/2015,		All values < ELV	101.0,112.0,96.0,112.0	mg/L	yes	1
			Dissolved Oxygen	22/01/2015,		741 401003 4 224		1116/ 2	763	
				14/04/2015,	6.0-9.0		7.8, 8.0, 7.9, 8.1			1
			pH	09/07/2015,	L	All values < ELV		pH units	yes	<u> </u>
				22/01/2015,						
				14/04/2015,	1000		756, 736, 908, 1037			1
			Conductivity	09/07/2015.		All values < ELV		μS/cm @20oC	yes	
				22/01/2015,	0.11		0.000 0.000 0.010 0.000			1
			Ammonia (as N)	14/04/2015,	0.14	All values < ELV	0.089, 0.029, 0.049, 0.035	ma/I	Voc	1
			Ammonia (as iv)	09/07/2015, 22/01/2015,	—	All values < ELV		mg/L	yes	—
				22/01/2013,	250		n/r, 50, 92, 118			1
				14/04/2015						
			Chloride	14/04/2015, 09/07/2015.	250	All values < ELV	.,,.	mg/L	yes	
			Chloride Ortho-phosphate (as PO4)	09/07/2015,	0.06	All values < ELV All values < ELV	0.025	mg/L mg/L		
			Ortho-phosphate (as PO4)	09/07/2015, 14/04/2015	0.06	All values < ELV	0.025	mg/L	yes	
				09/07/2015,		All values < ELV				

	urns summary	template-WATER	/WASTEWATER(SEWI	ER)		Lic No:	W0026-03		Year	201
				22/01/2015,	2.5					
			BOD	14/04/2015, 09/07/2015,	2.6	All values < ELV	,1.0, 1, <1.0, <1.0	mg/L	yes	
				22/01/2015,	50		<8, <8, 10, <4			
			Suspended Solids	14/04/2015, 09/07/2015,	50	All values < ELV	<8, <8, 10, <4	mg/L	yes	
			Fluoride	14/04/2015	0.5	All values < ELV	0.26	mg/L	yes	
			Sulphate	14/04/2015	200	All values < ELV	28	mg/L	yes	
			Aluminium	14/04/2015	N/A	All values < ELV	48	μg/L	yes	
			Barium	14/04/2015	1000	All values < ELV	130	μg/L	yes	
			Calcium	14/04/2015	N/A	All values < ELV	120	mg/L	yes	
			Cobalt	14/04/2015 14/04/2015	N/A 2000	All values < ELV	<1.0	μg/L	yes	
			Iron Magnesium	14/04/2015	2000 N/A	All values < ELV All values < ELV	250 8.7	μg/L mg/L	yes yes	
			Manganese	14/04/2015	300	All values < ELV	44	μg/L	yes	
			Potassium	14/04/2015	N/A	All values < ELV	4.7	mg/L	yes	
			Selenium	14/04/2015	10	All values < ELV	<1.0	μg/L	yes	
			Sodium	14/04/2015	200	All values < ELV	29	mg/L	yes	
			Antimony	14/04/2015	5	All values < ELV	<1.0	μg/L	yes	
	SELECT	SELECT	Total Heavy Metals	14/04/2015	Various	All values < ELV	All < ELV	μg/L	yes	
S9				22/01/2015,	T		50 400 444 400			
29	downstream	SELECT	Temperature	14/04/2015, 09/07/2015,	Temperature shall exc	All values < ELV	5.3, 10.8, 14.1, 12.3	degrees C	yes	
	domisticalli	JELEGI	remperature	22/01/2015,	İ	. III VOIGES A EEV		ucgrees c	,	
				14/04/2015,			102, 108, 96, 110			
			Dissolved Oxygen	09/07/2015,	1	All values < ELV		mg/L	yes	
				22/01/2015, 14/04/2015,	6.0-9.0		7.8, 8.0, 7.9. 7.9			
			pH	09/07/2015,		All values < ELV	7.0, 0.0, 7.0. 7.0	pH units	yes	
				22/01/2015,						
			Conductivity	14/04/2015,	1000	All values < ELV	760, 745, 886, 1023	μS/cm @20oC	yes	
			Conductivity	09/07/2015, 22/01/2015,		All values < ELV		µ3/ст @200С	yes	Organic input from site, forestry, roads,
				14/04/2015,	0.14		0.37, 0.29, 0.15, 0.14			agriculture, WWTP and commercial
			Ammonia (as N)	09/07/2015,	-	All values < ELV		mg/L	(if no please enter details in comments b	properties in the area.
				22/01/2015,				- Ur		,
				14/04/2015,	250		nr, 50, 87, 116			
			Chloride Ortho-phosphate (as PO4)	09/07/2015, 14/04/2015	0.06	All values < ELV All values < ELV	0.024	mg/L	yes	
								mg/L	yes	
			Total Oxidised Nitrogen	14/04/2015 14/04/2015 22/01/2015,	No abnormal Change	All values < ELV	3.1	mg/L mg/L	yes yes	
			Total Oxidised Nitrogen	14/04/2015		All values < ELV		mg/L		
				14/04/2015 22/01/2015, 14/04/2015, 09/07/2015.	No abnormal Change		3.1			
			Total Oxidised Nitrogen	14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 22/01/2015,	No abnormal Change	All values < ELV	3.1 25, 38, <20, <20	mg/L	yes	
			Total Oxidised Nitrogen	14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 22/01/2015, 14/04/2015,	No abnormal Change	All values < ELV	3.1	mg/L mg/L	yes	
			Total Oxidised Nitrogen COD	14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 22/01/2015, 14/04/2015, 09/07/2015, 22/01/2015,	No abnormal Change 40 2.6	All values < ELV All values < ELV	3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0	mg/L	yes yes	
			Total Oxidised Nitrogen COD BOD	14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 22/01/2015, 14/04/2015, 09/07/2015, 22/01/2015, 14/04/2015,	No abnormal Change	All values < ELV All values < ELV All values < ELV	3.1 25, 38, <20, <20	mg/L mg/L mg/L	yes yes yes	
			Total Oxidised Nitrogen COD BOD Suspended Solids	14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 22/01/2015, 14/04/2015, 09/07/2015, 22/01/2015, 14/04/2015, 09/07/2015.	No abnormal Change 40 2.6	All values < ELV All values < ELV All values < ELV All values < ELV	3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0 <8, <6, 9, <4	mg/L mg/L mg/L mg/L	yes yes yes	
			Total Oxidised Nitrogen COD BOD Suspended Solids Fluoride	14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015.	40 2.6 50 0.5	All values < ELV	3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0 <8, <8, 9, <4 0.21	mg/L mg/L mg/L mg/L mg/L mg/L	yes yes yes yes	
			Total Oxidised Nitrogen COD BOD Suspended Solids Fluoride Sulphate	14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 22/01/2015, 14/04/2015, 22/01/2015, 14/04/2015, 14/04/2015, 14/04/2015 14/04/2015	40 2.6 50 0.5 200	All values < ELV	3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0 <8, <8, 9, <4 0.21 27	mg/L mg/L mg/L mg/L mg/L mg/L mg/L	yes yes yes yes yes yes yes yes	
			Total Oxidised Nitrogen COD BOD Suspended Solids Fluoride	14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015.	40 2.6 50 0.5	All values < ELV	3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0 <8, <8, 9, <4 0.21	mg/L mg/L mg/L mg/L mg/L mg/L mg/L	yes yes yes yes	
			Total Oxidised Nitrogen COD BOD Suspended Solids Fluoride Sulphate Aluminium	14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 22/01/2015, 22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015 14/04/2015 14/04/2015 14/04/2015	40 2.6 50 0.5 200 N/A	All values < ELV	3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0 <8, <6, 9, <4 0.21 27 41	mg/L mg/L mg/L mg/L mg/L mg/L mg/L	yes yes yes yes yes yes yes yes	
			Total Oxidised Nitrogen COD BOD Suspended Solids Fluoride Sulphate Aluminium Barium	14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015, 14/04/2015, 14/04/2015, 14/04/2015, 14/04/2015 14/04/2015 14/04/2015 14/04/2015	0.5 0.5 0.5 0.0 N/A 1000 N/A N/A N/A	All values < ELV	3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0 <8, <8, 9, <4 0.21 27 41 130 120 <1.0	mg/L mg/L mg/L mg/L mg/L mg/L mg/L ug/L ug/L	yes yes yes yes yes yes yes yes	
			Total Oxidised Nitrogen COD BOD Suspended Solids Fluoride Sulphate Aluminium Barium Calcium Cobalt Iron	14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 14/04/2015, 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015	0.5 200 N/A N/A 2000	All values < ELV	3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0 <8, <8, 9, <4 0.21 27 41 130 120 <1.0 250	mg/L mg/L mg/L mg/L mg/L mg/L µg/L µg/L µg/L µg/L µg/L	yes yes yes yes yes yes yes yes	
			Total Oxidised Nitrogen COD BOD Suspended Solids Fluoride Sulphate Aluminium Barium Calcium Cobalt Iron Magnesium	14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015	0.5 200 N/A 1000 N/A 2000 N/A	All values < ELV	3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0 <8, <8, 9, <4 0.21 27 41 130 120 <1.0 250 8.8	mg/L mg/L mg/L mg/L mg/L mg/L µg/L	yes yes yes yes yes yes yes yes	
			Total Oxidised Nitrogen COD BOD Suspended Solids Fluoride Sulphate Aluminium Barium Calcium Cobalt Iron Magnesium Manganese	14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015	No abnormal Change 40 2.6 50 0.5 200 N/A 1000 N/A N/A N/A 2000 N/A 1000	All values < ELV	3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0 <8, <8, 9, <4 0.21 27 41 130 120 <1.0 250 8.8 46	mg/L mg/L mg/L mg/L mg/L mg/L µg/L	yes yes yes yes yes yes yes yes	
			Total Oxidised Nitrogen COD BOD Suspended Solids Fluoride Sulphate Aluminium Barium Colcium Cobalt Iron Magnesium Manganese Potassium	14/04/2015 14/04/2015, 14/04/2015, 16/04/2015, 16/04/2015, 16/04/2015, 16/04/2015, 16/04/2015, 16/04/2015, 16/04/2015, 14/04/	0.5 2.00 N/A N/A N/A 1000 N/A	All values < ELV	3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0 <8, <8, 9, <4 0.21 27 41 130 120 <1.0 250 8.8 46 5.5	mg/L mg/L mg/L mg/L mg/L mg/L μg/L	yes yes yes yes yes yes yes yes	
			COD Suspended Solids Fluoride Sulphate Aluminium Barlum Calcium Cobalt Iron Magnesium Manganese Potassium Selenium Selenium	14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015	No abnormal Change 40 2.6 50 0.5 200 N/A 1000 N/A 1000 N/A 1000 N/A 1000	All values < ELV	3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0 <8, <8, 9, <4 0.21 27 41 130 120 <1.0 250 8.8 46 5.5 <1.0	mg/L mg/L mg/L mg/L mg/L mg/L µg/L	yes yes yes yes yes yes yes yes	
			Total Oxidised Nitrogen COD BOD Suspended Solids Fluoride Sulphate Aluminium Barium Calcium Cobalt Iron Magnesium Manganese Potassium Selenium Sodium	14/04/2015 14/04/2015, 14/04/	0.5 2.00 N/A N/A N/A 1000 N/A	All values < ELV	3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0 <8, <8, 9, <4 0.21 27 41 130 120 <1.0 250 8.8 46 5.5 <1.0 31	mg/L mg/L mg/L mg/L mg/L μg/L	yes yes yes yes yes yes yes yes	
	CEIEFT	SFIECT	Total Oxidised Nitrogen COD BOD Suspended Solids Fluoride Sulphate Aluminium Barium Calcium Cobalt Iron Magnesium Manganese Potassium Selenium Sodium Antimony	14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015, 14/04/2015, 14/04/2015, 14/04/2015, 14/04/2015, 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015	No abnormal Change 40 2.6 50 0.5 200 N/A 1000 N/A N/A 1000 N/A 2000 N/A 1000	All values < ELV 3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0 <8, <8, 9, <4 0.21 27 41 130 120 <1.0 250 8.8 46 5.5 <1.0 31 <1.0	mg/L mg/L mg/L mg/L mg/L mg/L μg/L μg/L μg/L μg/L μg/L μg/L μg/L μ	yes yes yes yes yes yes yes yes		
	SELECT	SELECT	Total Oxidised Nitrogen COD BOD Suspended Solids Fluoride Sulphate Aluminium Barium Calcium Cobalt Iron Magnesium Manganese Potassium Selenium Sodium	14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015 14/04/2015	No abnormal Change 40 2.6 50 0.5 200 N/A 1000 N/A 1000 N/A 1000 N/A 1000	All values < ELV	3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0 <8, <8, 9, <4 0.21 27 41 130 120 <1.0 250 8.8 46 5.5 <1.0 31	mg/L mg/L mg/L mg/L mg/L μg/L	yes yes yes yes yes yes yes yes	
\$10			COD BOD Suspended Solids Fluoride Sulphate Aluminium Barium Calcium Cobalt Iron Magnesium Manganese Potassium Selenium Sodium Antimony Total Heavy Metals	14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 14/04/2015	No abnormal Change 40 2.6 50 0.5 200 N/A 1000 N/A N/A 1000 N/A 2000 N/A 1000	All values < ELV	3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0 <8, <8, 9, <4 0.21 27 41 130 120 <1.0 250 8.8 46 5.5 <1.0 31 <1.0	mg/L mg/L mg/L mg/L mg/L µg/L	yes yes yes yes yes yes yes yes	
\$10	SELECT downstream	SELECT	Total Oxidised Nitrogen COD BOD Suspended Solids Fluoride Sulphate Aluminium Barium Calcium Cobalt Iron Magnesium Manganese Potassium Selenium Sodium Antimony	14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 14/04/2015	No abnormal Change 40 2.6 50 0.5 200 N/A 1000 N/A 1000 N/A 10 200 5 Various	All values < ELV 3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0 <8, <8, 9, <4 0.21 27 41 130 120 <1.0 250 8.8 46 5.5 <1.0 31 <1.0 All < ELV	mg/L mg/L mg/L mg/L mg/L mg/L μg/L μg/L μg/L μg/L μg/L μg/L μg/L μ	yes yes yes yes yes yes yes yes		
\$10			COD BOD Suspended Solids Fluoride Sulphate Aluminium Barium Calcium Cobalt Iron Magnesium Manganese Potassium Selenium Sodium Antimony Total Heavy Metals	14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 14/04/2015	No abnormal Change 40 2.6 50 0.5 200 N/A 1000 N/A 1000 N/A 10 200 5 Various	All values < ELV	3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0 <8, <8, 9, <4 0.21 27 41 130 120 <1.0 250 8.8 46 5.5 <1.0 31 <1.0 All < ELV 5.0, 9.3, 12.5, 9.8	mg/L mg/L mg/L mg/L mg/L µg/L	yes yes yes yes yes yes yes yes	
S10			COD BOD Suspended Solids Fluoride Sulphate Aluminium Barium Calcium Cobalt Iron Magnesium Manganese Potassium Selenium Sodium Antimony Total Heavy Metals Temperature	14/04/2015 14/04/2015 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015	No abnormal Change 40 2.6 50 0.5 200 N/A 1000 N/A 1000 N/A 10 200 5 Various	All values < ELV	3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0 <8, <8, 9, <4 0.21 27 41 130 120 <1.0 250 8.8 46 5.5 <1.0 31 <1.0 All < ELV	mg/L mg/L mg/L mg/L mg/L µg/L	yes yes yes yes yes yes yes yes	
S10			COD BOD Suspended Solids Fluoride Sulphate Aluminium Barium Calcium Cobalt Iron Magnesium Manganese Potassium Selenium Sodium Antimony Total Heavy Metals	14/04/2015 14/04/2015 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015	No abnormal Change 40 2.6 50 0.5 200 N/A 1000 N/A 2000 N/A 1000 N/A 2000 S/A 1000 Topic of the second of the sec	All values < ELV	3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0 <8, <8, 9, <4 0.21 27 41 130 120 <1.0 250 8.8 46 5.5 <1.0 31 <1.0 All < ELV 5.0, 9.3, 12.5, 9.8	mg/L mg/L mg/L mg/L mg/L µg/L	yes yes yes yes yes yes yes yes	
\$10			COD Suspended Solids Fluoride Sulphate Aluminium Barium Calcium Cobalt Iron Magnesium Manganese Potassium Selenium Sodium Antimony Total Heavy Metals Temperature Dissolved Oxygen	14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 14/04/2015	No abnormal Change 40 2.6 50 0.5 200 N/A 1000 N/A 1000 N/A 10 200 5 Various	All values < ELV	3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0 <8, <8, 9, <4 0.21 27 41 130 120 <1.0 250 8.8 46 5.5 <1.0 31 <1.0 All < ELV 5.0, 9.3, 12.5, 9.8	mg/L mg/L mg/L mg/L mg/L mg/L ug/L	yes yes yes yes yes yes yes yes	
S10			COD BOD Suspended Solids Fluoride Sulphate Aluminium Barium Calcium Cobalt Iron Magnesium Manganese Potassium Selenium Sodium Antimony Total Heavy Metals Temperature	14/04/2015 14/04/2015 14/04/2015, 14/04/2015, 14/04/2015, 14/04/2015, 14/04/2015, 14/04/2015, 14/04/2015, 14/04/2015, 14/04/2015	No abnormal Change 40 2.6 50 0.5 200 N/A 1000 N/A 2000 N/A 1000 N/A 2000 S/A 1000 Topic of the second of the sec	All values < ELV	3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0 <8, <8, 9, <4 0.21 27 41 130 120 <1.0 250 8.8 46 5.5 <1.0 31 <1.0 All < ELV 5.0, 9.3, 12.5, 9.8	mg/L mg/L mg/L mg/L mg/L µg/L	yes yes yes yes yes yes yes yes	
S10			COD Suspended Solids Fluoride Sulphate Aluminium Barium Calcium Cobalt Iron Magnesium Manganese Potassium Selenium Sodium Antimony Total Heavy Metals Temperature Dissolved Oxygen	14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 14/04/2015, 14/04/2015	No abnormal Change 40 2.6 50 0.5 200 N/A 1000 N/A 2000 N/A 1000 N/A 2000 S/A 1000 Topic of the second of the sec	All values < ELV	3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0 <8, <8, 9, <4 0.21 27 41 130 120 <1.0 250 8.8 46 5.5 <1.0 31 <1.0 All < ELV 5.0, 9.3, 12.5, 9.8 93, 95, 95, 90 7.8, 7.7, 7.7, 7.5	mg/L mg/L mg/L mg/L mg/L mg/L ug/L	yes yes yes yes yes yes yes yes	
\$10			COD Suspended Solids Fluoride Sulphate Aluminium Barium Calcium Cobalt Iron Magnesium Manganese Potassium Selenium Sodium Antimony Total Heavy Metals Temperature Dissolved Oxygen	14/04/2015 22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015, 09/07/2015, 22/01/2015, 14/04/2015, 09/07/2015, 14/04/2015	No abnormal Change 40 2.6 50 0.5 200 N/A 1000 N/A N/A 2000 N/A 100 Solution of the second of the seco	All values < ELV	3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0 <8, <8, 9, <4 0.21 27 41 130 120 <1.0 250 8.8 46 5.5 <1.0 31 <1.0 All < ELV 5.0, 9.3, 12.5, 9.8	mg/L mg/L mg/L mg/L mg/L mg/L ug/L	yes yes yes yes yes yes yes yes	
S10			COD BOD Suspended Solids Fluoride Sulphate Aluminium Barium Calcium Cobait Iron Magnesium Manganese Potassium Sodium Antimony Total Heavy Metals Temperature Dissolved Oxygen	14/04/2015 14/04/2015	No abnormal Change 40 2.6 50 0.5 200 N/A 1000 N/A N/A 2000 N/A 100 Solution of the second of the seco	All values < ELV 3.1 25, 38, <20, <20 1.3, 1.7, <1.0, <1.0 <8, <8, 9, <4 0.21 27 41 130 120 <1.0 250 8.8 46 5.5 <1.0 31 <1.0 All < ELV 5.0, 9.3, 12.5, 9.8 93, 95, 95, 90 7.8, 7.7, 7.7, 7.5	mg/L mg/L mg/L mg/L mg/L mg/L pg/L yes yes yes yes yes yes yes yes			

k ivionitoring reti	irns summary	template-WATER,	/WASTEWATER(SEWE			Lic No:	W0026-03		Year	201
				22/01/2015, 14/04/2015,	250		nr, 25, 29, 24			
			Chloride	09/07/2015,		All values < ELV		mg/L	yes	
			Ortho-phosphate (as PO4)	14/04/2015	0.06	All values < ELV	0.026	mg/L	yes	
			Total Oxidised Nitrogen	14/04/2015	No abnormal Change	All values < ELV	3	mg/L	yes	
			COD	22/01/2015, 14/04/2015, 09/07/2015,	40	All values < ELV	27, 33, <20, <20	mg/L	yes	
			BOD	22/01/2015, 14/04/2015, 09/07/2015.	2.6	All values < ELV	<1.0, <1.0. 1.4, ,1.0	mg/L	yes	
			505	22/01/2015, 14/04/2015,	50	7 III Valides V EEV	<8, <8, <8, ,4		ųc.	
			Suspended Solids	09/07/2015,		All values < ELV		mg/L	yes	
			Fluoride	14/04/2015	0.5	All values < ELV	<0.020	mg/L	yes	
			Sulphate	14/04/2015	200	All values < ELV	19	mg/L	yes	
			Aluminium	14/04/2015	N/A	All values < ELV	31	μg/L	yes	
			Barium	14/04/2015	1000	All values < ELV	130	μg/L	yes	
			Calcium	14/04/2015	N/A	All values < ELV	120	mg/L	yes	
			Cobalt	14/04/2015	N/A	All values < ELV	<1.0	μg/L	yes	
			Iron	14/04/2015	2000	All values < ELV	270	μg/L	yes	
			Magnesium	14/04/2015	N/A	All values < ELV	7.2	mg/L	yes	
			Manganese	14/04/2015	1000	All values < ELV	47	μg/L	yes	
			Potassium	14/04/2015	N/A	All values < ELV	3	mg/L	yes	
			Selenium	14/04/2015	10	All values < ELV	<1.0	μg/L	yes	
			Sodium	14/04/2015	200	All values < ELV	12	mg/L	yes	
			Antimony	14/04/2015	5	All values < ELV	<1.0	μg/L	yes	
	SELECT	SELECT	Total Heavy Metals	14/04/2015	Various	All values < ELV	All < ELV	SELECT	yes	
S28	downstream	SELECT	Temperature	22/01/2015, 14/04/2015,	Temperature shall exc	All values < ELV	0.9, 11.3, 19.1, 11.4	degrees C	yes	
	downstream	SELECT		09/07/2015, 22/01/2015, 14/04/2015,		All values < ELV	110, 97, 120, 110	degrees C	yes	
			Dissolved Oxygen	09/07/2015,		All values < ELV			yes	
			рН	22/01/2015, 14/04/2015, 09/07/2015,	6.0-9.0	All values < ELV	7.9, 7.6, 8.6, 7.4	pH units	yes	
			Conductivity	22/01/2015, 14/04/2015,	1000	All values < ELV	375, 335, 234, 252	us/sm @20oC	yes	
			Conductivity	09/07/2015, 22/01/2015, 14/04/2015,	0.14	All values < ELV	0.022, ,0.020, 0.089, <0.020	μS/cm @20oC	yes	
			Ammonia (as N)	09/07/2015, 22/01/2015,	250	All values < ELV		mg/L	yes	
			Chloride	14/04/2015, 09/07/2015,		All values < ELV	nr, 29, 27, 26	mg/L	yes	
			Ortho-phosphate (as PO4)	14/04/2015	0.06	All values < ELV	<0.010	mg/L	yes	
			Total Oxidised Nitrogen	14/04/2015 22/01/2015, 14/04/2015,	No abnormal Change	All values < ELV	<0.20	mg/L	yes	
			COD	09/07/2015, 22/01/2015,	2.5	All values < ELV		mg/L	yes	
			BOD	14/04/2015, 09/07/2015, 22/01/2015,	2.6	All values < ELV	<1.0, <1.0, 2.5, <1.0	mg/L	yes	
			Suspended Solids	14/04/2015, 09/07/2015.	50	All values < ELV	,8, <8, <8, <4	mg/L	yes	
			Fluoride	14/04/2015	0.5	All values < ELV	<0.20	mg/L	yes	
			Sulphate	14/04/2015	200	All values < ELV	25	mg/L	yes	-
			Aluminium	14/04/2015	N/A	All values < ELV	17	μg/L	yes	
			Barium	14/04/2015	1000	All values < ELV	44	μg/L	yes	
			Calcium	14/04/2015	N/A	All values < ELV	45	mg/L	yes	
			Cobalt	14/04/2015	N/A	All values < ELV	<1.0	μg/L	yes	
			Iron	14/04/2015	2000	All values < ELV	32	μg/L	yes	
			Magnesium	14/04/2015	N/A	All values < ELV	4.2	mg/L	yes	
			Manganese	14/04/2015	1000	All values < ELV	22	μg/L	yes	
			Potassium	14/04/2015	N/A	All values < ELV	1.5	mg/L	yes	
			Selenium	14/04/2015	10	All values < ELV	<1.0	μg/L	yes	
			Sodium	14/04/2015	200	All values < ELV	19	mg/L	yes	
-			Antimony	14/04/2015	5	All values < ELV	<1.0	μg/L	yes	
	SELECT	SELECT	Total Heavy Metals	14/04/2015	Various	All values < ELV	All < ELV	SELECT	yes	
S29	downstream	SELECT	Temperature	22/01/2015, 14/04/2015, 09/07/2015,	Tmperature shall exce	All values < ELV	10.0, 2.5, 10.4, 16.6	degrees C	yes	
				22/01/2015, 14/04/2015,			93, 91, 85, 121	9		
			Dissolved Oxygen	09/07/2015. 22/01/2015,		All values < ELV			yes	

R Monitoring reti	urns summary	template-WATER	/WASTEWATER(SEWE	-		Lic No:	W0026-03		Year	20
			Conductivity	22/01/2015, 14/04/2015, 09/07/2015,	1000	All values < ELV	586, 586, 586, 497	μS/cm @20oC	yes	
			Conductivity	22/01/2015,		All values < LLV		μ5/cm @2000	yes	Organic input from site, forestry, roads,
			Ammonia (as N)	14/04/2015, 09/07/2015,	0.14	All values < ELV	0.45, 0.79, 0.39, 0.15	mg/L	(if no please enter details in comments	agriculture and commercial properties in the
			,	22/01/2015, 14/04/2015,	250		16, nr, 27, 16	Ŭ		urca.
			Chloride	09/07/2015,	230	All values < ELV	10, 111, 27, 10	mg/L	yes	
			Ortho-phosphate (as PO4)	14/04/2015	0.06	All values < ELV	<0.010	mg/L	yes	
			Total Oxidised Nitrogen	14/04/2015	No abnormal Change	All values < ELV	0.34	mg/L	yes	
				22/01/2015,	40					
			COD	14/04/2015, 09/07/2015,	40	All values < ELV	27, 48, 57, 54	mg/L	yes	
				22/01/2015,						
			BOD	14/04/2015, 09/07/2015,	2.6	All values < ELV	<1.0, 1.3, 1.7, 2.5	mg/L	ves	
			BOD	22/01/2015,		All values < LLV		IIIg/ L	yes	
				14/04/2015,	50		4, <8, <8, <3			
			Suspended Solids	09/07/2015,		All values < ELV		mg/L	yes	
			Fluoride	14/04/2015	0.5	All values < ELV	<0.20	mg/L	yes	
			Sulphate	14/04/2015	200	All values < ELV	17	mg/L	yes	
			Aluminium	14/04/2015	N/A	All values < ELV	120	μg/L	yes	
	_		Barium Calcium	14/04/2015	1000 N/A	All values < ELV	160 110	μg/L	yes	
	_		Calcium	14/04/2015	N/A N/A	All values < ELV All values < ELV	110 <1.0	mg/L	yes	
			Cobalt	14/04/2015	N/A 2000		<1.0 540	μg/L	yes	
			Iron Magnesium	14/04/2015	N/A	All values < ELV All values < ELV	6.2	μg/L mg/L	yes yes	
			Manganese	14/04/2015	1000	All values < ELV	130	μg/L	yes	
			Potassium	14/04/2015	N/A	All values < ELV	1.7	mg/L	yes	
			Selenium	14/04/2015	10	All values < ELV	<1.0	μg/L	yes	
			Sodium	14/04/2015	200	All values < ELV	15	mg/L	yes	
			Antimony	14/04/2015	5	All values < ELV	<1.0	μg/L	yes	
	SELECT	SELECT	Total Heavy Metals	14/04/2015	Various	All values < ELV	All < ELV	μg/L	yes	
\$30	downstream	SELECT	Temperature	22/01/2015, 14/04/2015, 09/07/2015,	Temperature shall exc	All values < ELV	8.4, 11.0, 18.4, 9.3	degrees C	yes	
			Dissolved Oxygen	22/01/2015, 14/04/2015, 09/07/2015,		All values < ELV	93, 98, 120, 100		yes	
			рН	22/01/2015, 14/04/2015, 09/07/2015,	6.0-9.0	All values < ELV	7.2, 7.5, 7.3, 7.2	pH units	yes	
			Conductivity	22/01/2015, 14/04/2015, 09/07/2015,	1000	All values < ELV	793, 561, 673, 482	μS/cm @20oC	yes	
			Ammonia (as N)	22/01/2015, 14/04/2015, 09/07/2015,	0.14	All values < ELV	1.7, 0.73, 0.92, 0.26	mg/L	(if no please enter details in comments	Fully engineered cells in area. Breakdown organics in bog most probably contributing elelvated concentrations
			Chloride	22/01/2015, 14/04/2015, 09/07/2015,	250	All values < ELV	nr, 141, 20, 12	mg/L	yes	
			Ortho-phosphate (as PO4)	14/04/2015	0.06	All values < ELV	<0.010	mg/L	yes	
			Total Oxidised Nitrogen	14/04/2015	No abnormal Change	All values < ELV	0.42	mg/L	yes	
			COD	22/01/2015, 14/04/2015, 09/07/2015.	40	All values < ELV	29, 56, 32, 28	mg/L	yes	
			BOD	22/01/2015, 14/04/2015, 09/07/2015,	2.6	All values < ELV	<1.0, 3.2, 1.5, 1	mg/L	(if no please enter details in comments	Fully engineered cells in area. Breakdown organics in bog most probably contributing elelvated concentrations
			Suspended Solids	22/01/2015, 14/04/2015, 09/07/2015,	50	All values < ELV	51, 13, ,8, 6	mg/L	yes	
			Fluoride	14/04/2015	0.5	All values < ELV	0.23	mg/L	yes	
			Sulphate	14/04/2015	200	All values < ELV	20	mg/L	yes	
			Aluminium	14/04/2015	N/A	All values < ELV	260	μg/L	yes	
			Barium Calcium	14/04/2015 14/04/2015	1000 N/A	All values < ELV All values < ELV	160 92	μg/L	yes	
			Calcium	14/04/2015	N/A N/A	All values < ELV All values < ELV	92 <1.0	mg/L	yes	
			Cobalt	14/04/2015	N/A 2000	All values < ELV All values < ELV	600	μg/L	yes	
			Iron Magnesium	14/04/2015	N/A	All values < ELV	5.9	μg/L mg/L	yes yes	1
			Manganese	14/04/2015	1000	All values < ELV	210	μg/L	yes	
			Potassium	14/04/2015	N/A	All values < ELV	8.6	μg/L mg/L	yes	
			Selenium	14/04/2015	10	All values < ELV	<1.0	μg/L	ves	
						All values < ELV	24	mg/L	yes	
			Sodium	14/04/2015	200	All values < ELV				
				14/04/2015 14/04/2015	200 5	All values < ELV	<1.0	μg/L	yes	
	SELECT	SELECT	Sodium						·	

AER Monitoring returns summary	template-WATER	/WASTEWATER(SEWI	ER)		Lic No:	W0026-03		Year	2015
			22/01/2015,						
			14/04/2015,			107, 97, 120, 97			
		Dissolved Oxygen	09/07/2015,		All values < ELV			yes	
			22/01/2015,						
			14/04/2015,	6.0-9.0		7.4, 7.3, 7.3, 7.4			
		pH	09/07/2015,		All values < ELV		pH units	yes	
			22/01/2015,						
			14/04/2015,	1000		655, 548, 673, 445	.,		
		Conductivity	09/07/2015, 22/01/2015,		All values < ELV		μS/cm @20oC	yes	Fully engineered cells in area. Breakdown of
			14/04/2015,	0.14		1.4, 0.75, 0.92, 1.1			organics in bog most probably contributing to
		Ammonia (as N)	09/07/2015.	0.14	All values < ELV	1.4, 0.75, 0.92, 1.1	mg/L	(if no please enter details in comments l	elelvated concentrations
		7 anniona (as it)	22/01/2015,		741 VOIGES VEEV		6/ -	(in no prease enter details in comments i	eleivateu concentrations
			14/04/2015,	250		nr, 43, 32, 45			
		Chloride	09/07/2015.		All values < ELV	,,,	mg/L	yes	
		Ortho-phosphate (as PO4)	14/04/2015	0.06	All values < ELV	<0.010	mg/L	yes	
		Total Oxidised Nitrogen	15/04/2015	No abnormal Change	All values < ELV	0.43	mg/L	yes	
		· ·	22/01/2015,					·	
			14/04/2015,	40		36, 53, 32, 45			
		COD	09/07/2015,		All values < ELV		mg/L	yes	
			22/01/2015,						One exceedence may be due to stagnant
			14/04/2015,	2.6		1.2, 3.1, 1.5, 4.6	6		water in drain
		BOD	09/07/2015,		All values < ELV		mg/L	(if no please enter details in comments b	
			22/01/2015, 14/04/2015,	50		<8, 16, <8, 19			
		Suspended Solids	09/07/2015,	50	All values < ELV	<8, 16, <8, 19	mg/L	yes	
		Fluoride	14/04/2015	0.5	All values < ELV	0.26	mg/L	yes	
		Sulphate	14/04/2015	N/A	All values < ELV	20	mg/L	yes	
		Aluminium	14/04/2015	200	All values < ELV	270	μg/L	yes	
		Barium	14/04/2015	1000	All values < ELV	130	μg/L μg/L	yes	
		Calcium	14/04/2015	N/A	All values < ELV	88	μg/L mg/L	yes	
		Cobalt	14/04/2015	N/A	All values < ELV	<1	μg/L	yes	
		Iron	14/04/2015	2000	All values < ELV	470	μg/L	yes	
		Magnesium	14/04/2015	N/A	All values < ELV	5.8	μg/L mg/L	yes	
		Manganese	14/04/2015	1000	All values < ELV	110	μg/L	yes	
		Potassium	14/04/2015	N/A	All values < ELV	1.6	μg/L mg/L	yes	
		Selenium	14/04/2015	10	All values < ELV	<1.0			
							μg/L	yes	
		Sodium	14/04/2015	200	All values < ELV	25	mg/L	yes	
		Antimony	14/04/2015	5	All values < ELV	<1.0	μg/L	yes	
SELECT	SELECT	Total Heavy Metals	14/04/2015	Various	All values < ELV	All < ELV	μg/L	yes	

^{*}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 SELECT SELECT	Date of inspection	Description of contamination	Source of contamination	C	orrective action	Comments	
SELECT							
	Location Reference			SELECT			

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

3	Was there any result in breach of licence requirements? If yes ple section of Table W3 belov		e comment	No	Additional information
	Was all monitoring carried out in accordance with EPA guidance				
а	and checklists for Quality of Aqueous Monitoring Data Reported to				
	the EPA? If no please detail what areas require improvement in	External /Internal Lab A	ssessment of		
4	additional information box	Quality checklist re	esults checklist	Yes	

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER) Lic No: W0026-03 Year 2015

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

Table WS: Licenseu	LIIIISSIUIIS LU W	ns to water and /or wastewater (sewer)-periodic monitoring (non-continuous)												
						ELV or trigger								
						values in licence or							Procedural	
	Emission	Parameter/		Frequency of		any revision						Procedural	reference	
	released to	SubstanceNote 1	Type of sample	monitoring	Averaging period	therof ^{Note 2}	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Method of analysis	reference source	standard number	
Emission reference no:	released to SELECT	SubstanceNote 1 SELECT	Type of sample SELECT	monitoring	Averaging period SELECT	therof ^{Note 2}	Licence Compliance criteria SELECT	Measured value	Unit of measurement SELECT	Compliant with licence SELECT	Method of analysis SELECT	reference source SELECT	standard number	
Emission reference no:			,,	monitoring	0 01	therof ^{Note 2}		Measured value					standard number	
Emission reference no:			,,	monitoring	0 01	therof ^{Note 2}		Measured value					standard number	

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

AER Monitoring retu	irns summary	template-WATER	/WASTEWATER(SEW	ER)		Lic No:	W0026-03		Year	2015			
Note 2: Where Emission Lir	nit Values (ELV) d	o not apply to your lice	nce please compare results	against EQS for Su	rface water or relevan		Additional Information		,				
5 Continuous monitor	ing				SELECT								
Does your site carry out co	ontinuous emissio	ns to water/sewer mon	itoring?										
If yes please summarise ye	yes please summarise your continuous monitoring data below in Table W4 and compare it its relevant Emission Limit Value (FLV)												
to its relevant Emission Lin	No No												
Did continuous monitoring equipment experience downtime? If yes please record downtime													
in table W4 below					No]				
8 Do you have a proactive se on site?	rvice contract for	each piece of continuo	us monitoring equipment		No								
Did abatement system					NO								
bypass occur during the													
reporting year? If yes													
please complete table													
W5 below													
Table W4: Summary	of average e	missions -continue	ous monitoring										
	Fable W4: Summary of average emissions -continuous monitoring ELV or trigger values in ELV or trigger values in												
1	released to	Substance	thereof	Period	Compliance Criteria	measurement	reporting year (kg)		(hours)	year	Comments		
Emission reference no:	SELECT	SELECT		SELECT	SELECT	SELECT							
	SELECT	SELECT		SELECT	SELECT	SELECT							

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

Table W5: Abatement system bypass reporting table

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

^{*}Measures taken or proposed to reduce or limit bypass frequency

Bund/Pipeline tes	ting template				Year	201					1			
bunu/ ripenne tes	ring template				Lic No:	W0026-03		i edi	201					1
Bund testing		dropdown menu cl	lick to see options				Additional information							
Are you required by yo	ur licence to undertake in	tegrity testing on bunds and cont	tainment structures ? if yes pl	ease fill out table B1 below	listing all new bunds and									
		I bunds which failed the integrity			bunds must be listed in									
the table below, please	e include all bunds outside	e the licenced testing period (mo	bile bunds and chemstore inc	luded)		Yes								
2 Please provide integrity	y testing frequency period	i				3 years	as per condition 3.11.5							
		erground pipelines (including stor	mwater and foul), Tanks, sum	ps and containers? (contain	ners refers to "Chemstore"									
3 type units and mobile b						Yes								
4 How many bunds are o		hin the required test schedule?				ΔΙΙ	ь							
6 How many mobile bund		iiii the required test schedule:				All	1							
7 Are the mobile bunds in	ncluded in the bund test s	schedule?				No	Bunds Regularly Changed							
		ted within the required test sche	dule?											
9 How many sumps on si 10 How many of these sur						N/A N/a								
	mps are integrity tested w tegrity failures in table Bi					N/a								
11 Do all sumps and cham						SELECT								
12 If yes to Q11 are these	failsafe systems included	in a maintenance and testing pro	ogramme?			SELECT								
12 If yes to Q11 are these failsafe systems included in a maintenance and testing programme? 13 Is the Fire Water Retention Pond included in your integrity test programme? SELECT SELECT														
	de Bala Communicada () (f bund /containment structure int		1										
Tab	ne bi. Summary details of	bunu /containment structure int	reginty test											
									Integrity reports					Results of retest(if in
Bund/Containment									maintained on		Integrity test failure		Scheduled date	current
structure ID	Type	Specify Other type	Product containment	Actual capacity	Capacity required*	Type of integrity test	Other test type	Test date	site?	Results of test	explanation <50 words	Corrective action taken	for retest	reporting ye
1A	reinforced concrete		Green waste			Hydraulic test		02/09/2015	Yes	Pass		SELECT		
1B	reinforced concrete		Green waste			Hydraulic test		02/09/2015	Yes	Pass			4	
1C	reinforced concrete reinforced concrete		Green waste Waste quarantine			Hydraulic test Hydraulic test		02/09/2015 02/09/2015	Yes Yes	Pass Pass				
3	reinforced concrete		Waste quarantine Waste inspection			Hydraulic test		02/09/2015	Yes	Pass				+
4	reinforced concrete		Waste oil bund			Hydraulic test		02/09/2015	Yes	Pass		SELECT		†
	nply with 25% or 110% containment						Commentary	_						
Has integrity testing be 15 line with BS8007/EPA G		nce with licence requirements an	id are all structures tested in			Yes								
16 Are channels/transfer s		nment systems tested?		bunding and storage guidel	nes	Yes								
		h integrity and available volume?				Yes								
		_												
Pipeline/undergro	ound structure testing							_						
Are you required by yo	ur licence to undertake in	tegrity testing* on underground	structures e.g. pipelines or su	mps etc ? if yes please fill o	ut table 2 below listing all									
		nich failed the integrity test and a				SELECT								
2 Please provide integrity						SELECT								
*please note integrity t	testing means water tight	ness testing for process and foul	pipelines (as required under y	our licence)										
Table	B2: Summary details of n	pipeline/underground structures i	integrity test	1										
	, , , , , , , , ,													
				Type of secondary										
				containment				Integrity test						
			Does this structure have			Integrity reports			Corrective action	Scheduled date	Results of retest(if in current			
Structure ID	Type system	Material of construction:	Secondary containment?		Type integrity testing	maintained on site?	Results of test	<50 words	taken	for retest	reporting year)			
	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT		1		SELECT	4		
-									1			#		
									+			#		
L									1	1		=		
							=							
		Please use comn	mentary for additional details	not answered by tables/ qu	estions above									

Groundwater/Soil monitoring template Lic No: W0026-03 2015 Year

		Comments	
1 Are you required to carry out groundwater monitoring as part of your licence requirements?	yes		Please provide an interpretation of groundwater monitoring data in the
2 Are you required to carry out soil monitoring as part of your licence requirements?	no		interpretation box below or if you require additional space please
Do you extract groundwater for use on site? If yes please specify use in comment			include a groundwater/contaminated land monitoring results
3 section	no		interpretaion as an additional section in this AER
Do monitoring results show that groundwater generic assessment criteria such as GTVs or IGVs are exceeded or is 4 there an upward trend in results for a substance? If yes, please complete the Groundwater Monitoring Guideline Template Report (link in cell G8) and submit separately through ALDER as a licensee return AND answer questions 5-12 below. Croundwater monitoring template	no		
5 Is the contamination related to operations at the facility (either current and/or historic)	N/A		
6 Have actions been taken to address contamination issues?If yes please summarise remediation strategies proposed/undertaken for the site	N/A		
7 Please specify the proposed time frame for the remediation strategy	N/A		
8 Is there a licence condition to carry out/update ELRA for the site?	yes	Condition 12.2.2	
9 Has any type of risk assesment been carried out for the site?	yes	Completed Groundwater Screening Assessment in 2013	The results for groundwater sampling completed by the Agency in 2015
10 Has a Conceptual Site Model been developed for the site?	yes	Completed as part of Groundwater Screening Assessment in 2013	indicated that the concentrations of contaminants of concern are consistent with historic analysis results for the site. The results indicated that a number of paramaters (e.g., ammonia, aluminium, iron, manganese and arsenic) in some down gradient wells in the south of the site exceeded the appropriate IGV or DWS. However, a number of these parameters are also elevated in the area
Have potential receptors been identified on and off site?	yes	Included in Groundwater Screening Assessment in 2013	background well (G4). Similarly, a number of parameters that were greater than the IGV and/or the Drinking Water Standrads at down gradient wells in the north of the site were also elevated in the background well in that area of the site (G14). All List I/II organic substances were less than the laboratory method detection limit and the majority of List I/II inorganic substance concentrations were less than the appropriate IGV and/or DWS. The results for 2015 indicated
12 Is there evidence that contamination is migrating offsite?	no		no increasing trend in groundwater parameters on site.

Table 1: Upgradient Groundwater monitoring results

										Upward trend in
										pollutant
	Sample									concentration
Date of	location	Parameter/		Monitoring	Maximum	Average				over last 5 years
sampling	reference	Substance	Methodology	frequency	Concentration++	Concentration+	unit	GTV's*	DWS	of monitoring data
22/01/15;										
14/04/15;										
13/07/15	G4	Temp	Purged Sample	Quarterly	11.1	10.6	degrees C	25	IGV	No
		DO	Purged Sample	Quarterly	22	16.5	% Saturation	N/A	IGV	No

Groundwater/Sail monitoring to	amplata		Lie Ne.	W0026 02		V	2015		
Groundwater/Soil monitoring to	empiate		Lic No:	W0026-03	I	Year	2015	l	
pH	Purged Sample	Quarterly	7.6	7.4	рН	>6.0-<9.0	IGV	No	
Conductivity	Purged Sample	Quarterly	615	562	uS/cm	1875	IGV	No	
Ammonia	Purged Sample	Quarterly	3.4	3.2	mg/l	0.175	IGV	No	
Chloride	Purged Sample	Quarterly	16	13.3	mg/l	187.5	IGV	No	
Ortho- phosphate	Purged Sample	Annually	<0.010	<0.010	mg/l	0.035	IGV	No	
TON	Purged Sample	Annually	<0.20	0.42	mg/l	No Abnormal Change	IGV	No	
тос	Purged Sample	Quarterly	6.7	6	mg/l	No Abnormal Change	IGV	No	
Alkalinity	Purged Sample	Annually	250	250	mg/l	200	DWS	No	
Fluoride	Purged Sample	Annually	0.89	0.89	mg/l	1	IGV	No	
Sulphate	Purged Sample	Annually	2	2	mg/l	187.5	IGV	No	
Coliforms	Purged Sample	Annually	<10	<10	no./100ml	0	IGV	No	
Aluminium	Purged Sample	Annually	2100	2100	ug/l	150	IGV	No	
Arsenic	Purged Sample	Annually	6.3	6.3	ug/l	7.5	IGV	No	
Barium	Purged Sample	Annually	560	560	ug/l		IGV	No	
Beryllium	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No	
Boron	Purged Sample	Annually	73	73	ug/l	750	IGV	No	
Cadmium	Purged Sample	Annually	0.08	0.08	ug/l	3.8	IGV	No	
Calcium	Purged Sample	Annually	92	92	Mg/l	200	DWS	No	
Cobalt	Purged Sample	Annually	1.2	1.2	ug/l		IGV	No	
Iron	Purged Sample	Annually	4300	4300	ug/l	200	IGV	No	
Lead	Purged Sample	Annually	3.4	3.4	ug/l	18.8	IGV	No	
Magnesium	Purged Sample	Annually	12	12	mg/l	50	IGV	No	
Manganese	Purged Sample	Annually	210	210	ug/l	50	IGV	No	
Nickel	Purged Sample	Annually	3.3	3.3	ug/l	15	IGV	No	
Potassium	Purged Sample	Annually	2.3	2.3	mg/l	5	IGV	No	
Selenium	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No	
Sodium	Purged Sample	Annually	14	14	mg/l	150	IGV	No	
Strontium	Purged Sample	Annually	940	940	ug/l		IGV	No	

	•										
Groundwat	ter/Soil mo	onitoring to	emplate	ı	Lic No:	W0026-03	Ī	Year	2015	ı	
		Thallium	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No	
		Uranium	Purged Sample	Annually	<1.0	<1.0	ug/l	9	IGV	No	
		Vanadium	Purged Sample	Annually	3.8	3.8	ug/l		IGV	No	
		Mercury	Purged Sample	Annually	<0.50	<0.50	ug/l	0.8	IGV	No	
		Antimony	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No	
		Chromium	Purged Sample	Annually	6.7	6.7	ug/l	37.5	IGV	No	
		Copper	Purged Sample	Annually	2.3	2.3	ug/l	1500	IGV	No	
		Zinc	Purged Sample	Annually	29	29	ug/l	100	IGV	No	
	G14	Temp.	Purged Sample	Quarterly	11.6	10.8	degrees C	25	IGV	No	
		DO	Purged Sample	Quarterly	104	82.5	% Saturation	N/A	IGV	No	
		pН	Purged Sample	Quarterly	8	7.8	pН	>6.0-<9.0	IGV	No	
		Conductivity	Purged Sample	Quarterly	502	428	uS/cm	1875	IGV	No	
		Ammonia	Purged Sample	Quarterly	2.3	1.9	mg/l	0.175	IGV	No	
		Chloride	Purged Sample	Quarterly	16	14.3	mg/l	187.5	IGV	No	
		Ortho- phosphate	Purged Sample	Annually	<0.010	<0.010	mg/l	0.035	IGV	No	
		TON	Purged Sample	Annually	<0.20	<0.20	mg/l	No Abnormal Change	IGV	No	
		TOC	Purged Sample	Quarterly	3.6	3.2	mg/l	No Abnormal Change	IGV	No	
		Alkalinity	Purged Sample	Annually	180	180	mg/l	200	DWS	No	
		Fluoride	Purged Sample	Annually	1.5	1.5	mg/l	1	IGV	No	
		Sulphate	Purged Sample	Annually	19	19	mg/l	187.5	IGV	No	
		Coliforms	Purged Sample	Annually	10	10	no./100ml	0	IGV	No	
		Aluminium	Purged Sample	Annually	370	370	ug/l	150	IGV	No	
		Arsenic	Purged Sample	Annually	2	2	ug/l	7.5	IGV	No	
		Barium	Purged Sample	Annually	1100	1100	ug/l		IGV	No	
		Beryllium	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No	
		Boron	Purged Sample	Annually	180	180	ug/l	750	IGV	No	
		Cadmium	Purged Sample	Annually	0.03	0.03	ug/l	3.8	IGV	No	

Groundwater/Soil monitoring template					Lic No:	W0026-03		Year	2015		
	,	Calcium	Purged Sample		33	33	Ma/I			No	
							Mg/I	200			
		Cobalt	Purged Sample		<1.0	<1.0	ug/l	 		No	
		Iron	Purged Sample		11000	11000	ug/l			No	
		Lead	Purged Sample	Annually	<1.0	<1.0	ug/l	18.8		No	
		Magnesium	Purged Sample	Annually	10	10	mg/l	50	IGV	No	
		Manganese	Purged Sample	Annually	94	94	ug/l	50	IGV	No	
		Nickel	Purged Sample	Annually	8.6	8.6	ug/l	15	IGV	No	
		Potassium	Purged Sample	Annually	3.3	3.3	mg/l	5	IGV	No	
		Selenium	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No	
		Sodium	Purged Sample	Annually	52	52	mg/l	150	IGV	No	
		Strontium	Purged Sample	Annually	750	750	ug/l		IGV	No	
		Thallium	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No	
		Uranium	Purged Sample	Annually	<1.0	<1.0	ug/l	9	IGV	No	
		Vanadium	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No	
		Mercury	Purged Sample	Annually	<0.50	<0.50	ug/l	0.8	IGV	No	
		Antimony	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No	
		Chromium	Purged Sample	Annually	2.6	2.6	ug/l	37.5	IGV	No	
		Copper	Purged Sample	Annually	3.2	3.2	ug/l	1500	IGV	No	
		Zinc	Purged Sample	Annually	59	59	ug/l	100	IGV	No	
	Wheelans	_									
	Deep	Temp.	Purged Sample		11.5	11.5	degrees C			No	
		DO	Purged Sample	Quarterly	28	28	% Saturation	N/A	IGV	No	
		pН	Purged Sample	Quarterly	7.4	7.4	pH	>6.0-<9.0	IGV	No	
		Conductivity	Purged Sample	Quarterly	618	618	uS/cm	1875	IGV	No	
		Ammonia	Purged Sample	Quarterly	0.28	0.28	mg/l	0.175	IGV	No	
		Chloride	Purged Sample	Quarterly	18	18	mg/l	187.5	IGV	No	
		Ortho- phosphate	Purged Sample	Annually	<0.010	<0.010	mg/l	0.035	IGV	No	
		TON	Purged Sample	Annually	<0.20	<0.20	mg/l	No Abnormal Change	IGV	No	

Ground-water/	Cail manitaring to	amplata		Lie Ne.	M003C 03		V	201-	
Groundwater/	Soil monitoring to	empiate	I	Lic No:	W0026-03	l	Year No	2015	
	тос	Purged Sample	Quarterly	<1.0	<1.0	mg/l	Abnormal Change	IGV	No
	Alkalinity	Purged Sample	Annually	284	284	mg/l	200	DWS	No
	Fluoride	Purged Sample	Annually	2.3	2.3	mg/l	1	IGV	No
	Sulphate	Purged Sample	Annually	28	28	mg/l	187.5	IGV	No
	Coliforms	Purged Sample	Annually	<10	<10	no./100ml	0	IGV	No
	Aluminium	Purged Sample	Annually	<10	<10	ug/l	150	IGV	No
	Arsenic	Purged Sample	Annually	<1.0	<1.0	ug/l	7.5	IGV	No
	Barium	Purged Sample	Annually	82	82	ug/l		IGV	No
	Beryllium	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No
	Boron	Purged Sample	Annually	390	390	ug/l	750	IGV	No
	Cadmium	Purged Sample	Annually	<0.020	<0.020	ug/l	3.8	IGV	No
	Calcium	Purged Sample	Annually	54	54	Mg/I	200	DWS	No
	Cobalt	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No
	Iron	Purged Sample	Annually	41	41	ug/l	200	IGV	No
	Lead	Purged Sample	Annually	<1.0	<1.0	ug/l	18.8	IGV	No
	Magnesium	Purged Sample	Annually	44	44	mg/l	50	IGV	No
	Manganese	Purged Sample	Annually	13	13	ug/l	50	IGV	No
	Nickel	Purged Sample	Annually	,1.0	,1.0	ug/l	15	IGV	No
	Potassium	Purged Sample	Annually	3.9	3.9	mg/l	5	IGV	No
	Selenium	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No
	Sodium	Purged Sample	Annually	32	32	mg/l	150	IGV	No
	Strontium	Purged Sample	Annually	>10000	>10000	ug/l		IGV	No
	Thallium	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No
	Uranium	Purged Sample	Annually	<1.0	<1.0	ug/l	9	IGV	No
	Vanadium	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No
	Mercury	Purged Sample	Annually	<0.50	<0.50	ug/l	0.8	IGV	No
	Antimony	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No
	Chromium	Purged Sample	Annually	3.4	3.4	ug/l	37.5	IGV	No

Groundwater	/Soil monitoring	emplate		Lic No:	W0026-03		Year	2015		
	Copper	Purged Sample	Annually	<1.0	<1.0	ug/l	1500		No	
	Zinc	Purged Sample		99	99			IGV		
		Purged Sample	Annually	99	99	ug/l	100	IGV	No	
	eelans nallow Temp.	Purged Sample	Quarterly	9.9	9.9	degrees C	25	IGV	No	
	DO	Purged Sample	Quarterly	19	19	% Saturation	N/A	IGV	No	
	рН	Purged Sample	Quarterly	7.3	7.3	pН	>6.0-<9.0	IGV	No	
	Conductivity	Purged Sample	Quarterly	70	70	uS/cm	1875	IGV	No	
	Ammonia	Purged Sample	Quarterly	0.039	0.039	mg/l	0.175	IGV	No	
	Chloride	Purged Sample	Quarterly	24	24	mg/l	187.5	IGV	No	
	Ortho- phosphate	Purged Sample	Annually	0.012	0.012	mg/l	0.035	IGV	No	
	TON	Purged Sample	Annually	3.4	3.4	mg/l	No Abnormal Change	IGV	No	
	TOC	Purged Sample	Quarterly	3.3	3.3	mg/l	No Abnormal Change	IGV	No	
	Alkalinity	Purged Sample	Annually	310	310	mg/l	200	DWS	No	
	Fluoride	Purged Sample	Annually	<.02	<.02	mg/l	1	IGV	No	
	Sulphate	Purged Sample	Annually	13	13	mg/l	187.5	IGV	No	
	Coliforms	Purged Sample	Annually	1300	1300	no./100ml	0	IGV	No	
	Aluminium	Purged Sample	Annually	<10	<10	ug/l	150	IGV	No	
	Arsenic	Purged Sample	Annually	<1.0	<1.0	ug/l	7.5	IGV	No	
	Barium	Purged Sample	Annually	110	110	ug/l		IGV	No	
	Beryllium	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No	
	Boron	Purged Sample	Annually	49	49	ug/l	750	IGV	No	
	Cadmium	Purged Sample	Annually	0.41	0.41	ug/l	3.8	IGV	No	
	Calcium	Purged Sample	Annually	140	140	Mg/l	200	DWS	No	
	Cobalt	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No	
	Iron	Purged Sample	Annually	600	600	ug/l	200	IGV	No	
	Lead	Purged Sample	Annually	10	10	ug/l	18.8	IGV	No	
	Magnesium	Purged Sample	Annually	7.7	7.7	mg/l	50	IGV	No	
	Manganese	Purged Sample	Annually	25	25	ug/l	50	IGV	No	

Groundwater/Soil monitoring template	Lic No:	W0026-03		Year	2015	
Nickel Purged Sample Annually	1.8	1.8	ug/l	15	IGV	No
Potassium Purged Sample Annually	7.3	7.3	mg/l	5	IGV	No
Selenium Purged Sample Annually	<1.0	<1.0	ug/l		IGV	No
Sodium Purged Sample Annually	7.9		mg/l	150	IGV	No
Strontium Purged Sample Annually	500		ug/l		IGV	No
Thallium Purged Sample Annually	<1.0		ug/l		IGV	No
Uranium Purged Sample Annually	<1.0	<1.0	ug/l	9	IGV	No
Vanadium Purged Sample Annually	<1.0	<1.0	ug/l		IGV	No
Mercury Purged Sample Annually	<0.50		ug/l	0.8	IGV	No
Antimony Purged Sample Annually	<1.0	<1.0	ug/l		IGV	No
Chromium Purged Sample Annually	12	12	ug/l	37.5	IGV	No
Copper Purged Sample Annually	84	84		1500	IGV	No
Zinc Purged Sample Annually	920	920		100	IGV	No
			SELECT			SELECT

^{.+} where average indicates arithmetic mean

Table 2: Downgradient Groundwater monitoring results

	201111814		rate: incinte							
Date of sampling	Sample location reference	Parameter/ Substance		Monitoring frequency	Maximum Concentration	Average Concentration	unit	GTV's*	SELECT**	Upward trend in yearly average pollutant concentration over last 5 years of monitoring data
	G1	Temp.	Purged Sample	Quarterly	10.7	10.9	degrees C	25	IGV	No
		DO	Purged Sample	Quarterly	38	30.3	% Saturation	N/A	IGV	No
		pН	Purged Sample	Quarterly	7.2	7	рН	>6.0-<9.0	IGV	No
		Conductivity	Purged Sample	Quarterly	1036	1040	uS/cm	1875	IGV	No
		Ammonia	Purged Sample	Quarterly	0.99	1.06	mg/l	0.175	IGV	No
		Chloride	Purged Sample	Quarterly	66	71	mg/l	187.5	IGV	No
		Ortho- phosphate	Purged Sample	Annually	<0.010	<0.010	mg/l	0.035	IGV	No
		TON	Purged Sample	Annually	0.42	0.42	mg/l	No Abnormal Change	IGV	No

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

Groundwater/Soil monit	toring to	mulata		Lia Nia .	W0036 03		V	2045	
Groundwater/Soil Monit	toring te	impiate		Lic No:	W0026-03		Year No	2015	
	TOC	Purged Sample	Quarterly	6.3	6.1	mg/l	Abnormal Change	IGV	No
	Alkalinity	Purged Sample	·	428	428	mg/l			No
F	Fluoride	Purged Sample	Annually	1.3	1.3	mg/l	1	IGV	No
S	Sulphate	Purged Sample	Annually	44	44	mg/l	187.5	IGV	No
Co	oliforms	Purged Sample	Annually	<10	<10	no./100ml	0	IGV	No
Alu	luminium	Purged Sample	Annually	530	530	ug/l	150	IGV	No
A	Arsenic	Purged Sample	Annually	1.1	1.1	ug/l	7.5	IGV	No
E	Barium	Purged Sample	Annually	260	260	ug/l		IGV	No
В	eryllium	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No
	Boron	Purged Sample	Annually	290	290	ug/l	750	IGV	No
Ca	admium	Purged Sample	Annually	0.12	0.12	ug/l	3.8	IGV	No
С	Calcium	Purged Sample	Annually	120	120	Mg/I	200	DWS	No
	Cobalt	Purged Sample	Annually	2.7	2.7	ug/l		IGV	No
	Iron	Purged Sample	Annually	1600	1600	ug/l	200	IGV	No
	Lead	Purged Sample	Annually	2.4	2.4	ug/l	18.8	IGV	No
Ma	agnesium	Purged Sample	Annually	53	53	mg/l	50	IGV	No
Ma	anganese	Purged Sample	Annually	200	200	ug/l	50	IGV	No
	Nickel	Purged Sample	Annually	14	14	ug/l	15	IGV	No
Po	otassium	Purged Sample	Annually	4.5	4.5	mg/l	5	IGV	No
Se	elenium	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No
S	Sodium	Purged Sample	Annually	52	52	mg/l	150	IGV	No
St	trontium	Purged Sample	Annually	8900	8900	ug/l		IGV	No
Т	「hallium	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No
U	Jranium	Purged Sample	Annually	<1.0	<1.0	ug/l	9	IGV	No
Va	anadium	Purged Sample	Annually	1.5	1.5	ug/l		IGV	No
N.	Mercury	Purged Sample	Annually	<0.50	<0.50	ug/l	0.8	IGV	No
Ai	Intimony	Purged Sample	Annually	<1	<1	ug/l		IGV	No
Ch	hromium	Purged Sample	Annually	8.2	8.2	ug/l	37.5	IGV	No

Gro	undwater/Soil m	onitoring to	emplate		Lic No:	W0026-03		Year	2015		
		Copper	Purged Sample	Annually	4.2	4.2	ug/l	1500	IGV	No	
		Zinc	Purged Sample	Annually	28	28	ug/l	100	IGV	No	
-											
	G12	Temp.	Purged Sample	Quarterly	11.4	10.9	degrees C	25	IGV	No	
		DO	Purged Sample	Quarterly	46	22.5	% Saturation	N/A	IGV	No	
		pН	Purged Sample	Quarterly	7.4	7.2	pН	>6.0-<9.0	IGV	No	
		Conductivity	Purged Sample	Quarterly	657	647	uS/cm	1875	IGV	No	
		Ammonia	Purged Sample	Quarterly	3.3	3.2	mg/l	0.175	IGV	No	
		Chloride	Purged Sample	Quarterly	30	29	mg/l	187.5	IGV	No	
		Ortho- phosphate	Purged Sample	Annually	<0.010	<0.010	mg/l	0.035	IGV	No	
		TON	Purged Sample	Annually	<0.20	<0.20	mg/l	No Abnormal Change	IGV	No	
		TOC	Purged Sample	Quarterly	4.8	4.5	mg/l	No Abnormal Change	IGV	No	
		Alkalinity	Purged Sample	Annually	297	297	mg/l	200	DWS	No	
		Fluoride	Purged Sample	Annually	0.62	0.62	mg/l	1	IGV	No	
		Sulphate	Purged Sample	Annually	5	5	mg/l	187.5	IGV	No	
		Coliforms	Purged Sample	Annually	10	10	no./100ml	0	IGV	No	
		Aluminium	Purged Sample	Annually	130	130	ug/l	150	IGV	No	
		Arsenic	Purged Sample	Annually	10	10	ug/l	7.5	IGV	No	
		Barium	Purged Sample	Annually	1000	1000	ug/l		IGV	No	
		Beryllium	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No	
		Boron	Purged Sample	Annually	84	84	ug/l	750	IGV	No	
		Cadmium	Purged Sample	Annually	0.07	0.07	ug/l	3.8	IGV	No	
		Calcium	Purged Sample	Annually	100	100	Mg/l	200	DWS	No	
		Cobalt	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No	
		Iron	Purged Sample	Annually	1900	1900	ug/l	200	IGV	No	
		Lead	Purged Sample	Annually	1.6	1.6	ug/l	18.8	IGV	No	
		Magnesium	Purged Sample	Annually	19	19	mg/l	50	IGV	No	
		Manganese	Purged Sample	Annually	510	510	ug/l	50	IGV	No	j

Groundwater/Soil monitoring template			Lic No:	W0026-03		Year	2015		
				-	T .				
Nickel	Purged Sample	Annually	<1.0	<1.0	ug/l	15	IGV	No	
Potassium	Purged Sample	Annually	2.5	2.5	mg/l	5	IGV	No	
Selenium	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No	
Sodium	Purged Sample	Annually	19	19	mg/l	150	IGV	No	
Strontium	Purged Sample	Annually	1300	1300	ug/l		IGV	No	
Thallium	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No	
Uranium	Purged Sample	Annually	1.2	1.2	ug/l	9	IGV	No	
Vanadium	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No	
Mercury	Purged Sample	Annually	<0.50	<0.50	ug/l	0.8	IGV	No	
Antimony	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No	
Chromium	Purged Sample	Annually	4.5	4.5	ug/l	37.5	IGV	No	
Copper	Purged Sample	Annually	4.8	4.8	ug/l	1500	IGV	No	
Zinc	Purged Sample	Annually	24	24	ug/l	100	IGV	No	
242							1011		
G13 Temp.	Purged Sample	Quarterly	11.8	11.3	degrees C	25	IGV	No	
DO	Purged Sample	Quarterly	56	26.8	% Saturation	N/A	IGV	No	
рН	Purged Sample	Quarterly	6.8	6.8	рН	>6.0-<9.0	IGV	No	
Conductivit	Purged Sample	Quarterly	1164	1114	uS/cm	1875	IGV	No	
Ammonia	Purged Sample	Quarterly	4	4	mg/l	0.175	IGV	No	
Chloride	Purged Sample	Quarterly	19	19	mg/l	187.5	IGV	No	
Ortho- phosphate	Purged Sample	Annually	<0.010	<0.010	mg/l	0.035	IGV	No	
TON	Purged Sample	Annually	<0.20	<0.20	mg/l	No Abnormal Change	IGV	No	
TOC	Purged Sample	Quarterly	13.3	12	mg/l	No Abnormal Change	IGV	No	
Alkalinity	Purged Sample		554	554	mg/l	_	DWS	No	
Fluoride	Purged Sample		<0.4	<0.4	mg/l		IGV	No	
Sulphate	Purged Sample		53	53	mg/l	187.5		No	
Coliforms	Purged Sample		84	84	no./100ml		IGV	No	
Aluminium			790	790	ug/l		IGV	No	

Groundwater/Soil monitoring	g template		Lic No:	W0026-03		Year	2015		
Arsen	Purged Sample	Annually	8	8	ug/l	7.5	IGV	No	
Bariur	Purged Sample	Annually	1700	1700	ug/l		IGV	No	
Berylliu	m Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No	
Boror	Purged Sample	Annually	31	31	ug/l	750	IGV	No	
Cadmiu	m Purged Sample	Annually	0.12	0.12	ug/I	3.8	IGV	No	
Calciu	n Purged Sample	Annually	210	210	Mg/l	200	DWS	No	
Coba	Purged Sample	Annually	1.3	1.3	ug/l		IGV	No	
Iron	Purged Sample	Annually	10000	10000	ug/l	200	IGV	No	
Lead	Purged Sample	Annually	2.4	2.4	ug/l	18.8	IGV	No	
Magnes	um Purged Sample	Annually	5.7	5.7	mg/l	50	IGV	No	
Mangan	ese Purged Sample	Annually	400	400	ug/l	50	IGV	No	
Nicke	Purged Sample	Annually	1.2	1.2	ug/I	15	IGV	No	
Potassi	m Purged Sample	Annually	1.2	1.2	mg/l	5	IGV	No	
Seleniu	m Purged Sample	Annually	<1.0	<1.0	ug/I		IGV	No	
Sodiu	n Purged Sample	Annually	13	13	mg/l	150	IGV	No	
Strontiu	m Purged Sample	Annually	580	580	ug/l		IGV	No	
Thalliu	n Purged Sample	Annually	<1.0	<1.0	ug/I		IGV	No	
Uraniu	n Purged Sample	Annually	<1.0	<1.0	ug/I	9	IGV	No	
Vanadi	m Purged Sample	Annually	4.1	4.1	ug/l		IGV	No	
Mercu	y Purged Sample	Annually	<0.50	<0.50	ug/l	0.8	IGV	No	
Antimo	ny Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No	
Chromi	m Purged Sample	Annually	14	14	ug/l	37.5	IGV	No	
Сорре	r Purged Sample	Annually	1.5	1.5	ug/l	1500	IGV	No	
Zinc	Purged Sample	Annually	24	24	ug/l	100	IGV	No	
G15 Temp	Purged Sample		11.2	10.5	degrees C		IGV	No	
DO	Purged Sample	Quarterly	38	30	% Saturation	N/A	IGV	No	
pH	Purged Sample	Quarterly	7.5	7.4	pH	>6.0-<9.0	IGV	No	
Conduct	vity Purged Sample	Quarterly	433	420	uS/cm	1875	IGV	No	

Groundwater/Soil monitoring temp	olate	Lic No:	W0026-03		Year	2015		
Ammonia Purg	ged Sample Quarterly	1.8	1.6	mg/l	0.175	IGV	No	
	ged Sample Quarterly	10	10	mg/l	187.5	IGV	No	
Ortho- phosphate Purg	ged Sample Annually	<0.010	<0.010	mg/l	0.035	IGV	No	
					No Abnormal			
TON Pure	ged Sample Annually	<0.20	<0.20	mg/l	Change No	IGV	No	
TOC Purç	ged Sample Quarterly	3.1	3.4	mg/l	Abnormal Change	IGV	No	
Alkalinity Purç	ged Sample Annually	202	202	mg/l	200	DWS	No	
Fluoride Purç	ged Sample Annually	1.3	1.3	mg/l	1	IGV	No	
Sulphate Purg	ged Sample Annually	<2	<2	mg/l	187.5	IGV	No	
Coliforms Purç	ged Sample Annually	<10	<10	no./100ml	0	IGV	No	
Aluminium Purç	ged Sample Annually	390	390	ug/l	150	IGV	No	
Arsenic Purç	ged Sample Annually	8.3	8.3	ug/l	7.5	IGV	No	
Barium Purç	ged Sample Annually	1200	1200	ug/l		IGV	No	
Beryllium Purç	ged Sample Annually	<1.0	<1.0	ug/l		IGV	No	
Boron Purç	ged Sample Annually	56	56	ug/l	750	IGV	No	
Cadmium Puro	ged Sample Annually	0.15	0.15	ug/l	3.8	IGV	No	
Calcium Purç	ged Sample Annually	80	80	Mg/I	200	DWS	No	
Cobalt Purg	ged Sample Annually	1	1	ug/l		IGV	No	
Iron Purç	ged Sample Annually	1900	1900	ug/l	200	IGV	No	
Lead Purç	ged Sample Annually	2.8	2.8	ug/l	18.8	IGV	No	
Magnesium Purç	ged Sample Annually	13	13	mg/l	50	IGV	No	
Manganese Purç	ged Sample Annually	220	220	ug/l	50	IGV	No	
Nickel Purç	ged Sample Annually	2.1	2.1	ug/l	15	IGV	No	
Potassium Purç	ged Sample Annually	1.7	1.7	mg/l	5	IGV	No	
Selenium Purç	ged Sample Annually	<1.0	<1.0	ug/l		IGV	No	
Sodium Purg	ged Sample Annually	12	12	mg/l	150	IGV	No	
Strontium Purç	ged Sample Annually	910	910	ug/l		IGV	No	
Thallium Purç	ged Sample Annually	<1.0	<1.0	ug/l		IGV	No	
Uranium Purç	ged Sample Annually	<1.0	<1.0	ug/l	9	IGV	No	

Ground	Groundwater/Soil monitoring template				Lic No:	W0026-03		Year	2015		
		Vanadium	Purged Sample	Annually	1.6	1.6	ug/l			No	
		Mercury	Purged Sample		<0.50	<0.50	ug/l	0.8		No	1
		Antimony	Purged Sample	·	<1.0	<1.0	ug/l			No	1
	1	Chromium	Purged Sample		4.2	4.2	ug/l	37.5		No	ļ
	1	Copper	Purged Sample	·	1.5	1.5	ug/I	1500		No	1
	1	Zinc	Purged Sample		28	28	ug/l			No	1
	1		gsa sample	,				100			1
	G2	Temp.	Purged Sample	Quarterly	10.7	10.1	degrees C	25	IGV	No	1
		DO	Purged Sample	Quarterly	62	43	% Saturation	N/A	IGV	No	1
		pН	Purged Sample	Quarterly	7.5	7.5	рН	>6.0-<9.0	IGV	No	ļ
		Conductivity	Purged Sample	Quarterly	473	468	uS/cm	1875	IGV	No	1
		Ammonia	Purged Sample	Quarterly	0.72	0.6	mg/l	0.175	IGV	No	1
		Chloride	Purged Sample	Quarterly	11	10.5	mg/l	187.5	IGV	No	ļ
		Ortho- phosphate	Purged Sample	Annually	<0.010	<0.010	mg/l	0.035	IGV	No	1
		TON	Purged Sample	Annually	<0.20	<0.20	mg/l	No Abnormal Change	IGV	No	
		TOC	Purged Sample	Quarterly	3.1	2.8	mg/l	No Abnormal Change	IGV	No	
		Alkalinity	Purged Sample	Annually	246	246	mg/l	200	DWS	No	1
		Fluoride	Purged Sample	Annually	0.65	0.65	mg/l	1	IGV	No	1
		Sulphate	Purged Sample	Annually	<2	<2	mg/l	187.5	IGV	No	1
		Coliforms	Purged Sample	Annually	<10	<10	no./100ml	0	IGV	No	1
		Aluminium	Purged Sample	Annually	470	470	ug/l	150	IGV	No	1
		Arsenic	Purged Sample	Annually	2.3	2.3	ug/l	7.5	IGV	No	1
		Barium	Purged Sample	Annually	120	120	ug/l		IGV	No	1
		Beryllium	Purged Sample	Annually	<1	<1	ug/l		IGV	No	1
		Boron	Purged Sample	Annually	80	80	ug/l	750	IGV	No	1
		Cadmium	Purged Sample	Annually	0.22	0.22	ug/l	3.8	IGV	No	1
		Calcium	Purged Sample	Annually	66	66	Mg/l	200	DWS	No	1
		Cobalt	Purged Sample	Annually	1.4	1.4	ug/l		IGV	No	1

Groundy	/ater/Soil m	onitoring to	emplate		Lic No:	W0026-03		Year	2015		
Groundw	acci, Joli III										
		Iron	Purged Sample	Annually	760	760	ug/l		IGV	No	
		Lead	Purged Sample	Annually	3.1	3.1	ug/l	18.8	IGV	No	
		Magnesium	Purged Sample	Annually	14	14	mg/l	50	IGV	No	
		Manganese	Purged Sample	Annually	200	200	ug/l	50	IGV	No	
		Nickel	Purged Sample	Annually	4.4	4.4	ug/l	15	IGV	No	
		Potassium	Purged Sample	Annually	1.6	1.6	mg/l	5	IGV	No	
		Selenium	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No	
		Sodium	Purged Sample	Annually	40	40	mg/l	150	IGV	No	
		Strontium	Purged Sample	Annually	800	800	ug/l		IGV	No	
		Thallium	Purged Sample	Annually	<1	<1	ug/l		IGV	No	
		Uranium	Purged Sample	Annually	<1.0	<1.0	ug/l	9	IGV	No	
		Vanadium	Purged Sample	Annually	2.3	2.3	ug/l		IGV	No	
		Mercury	Purged Sample	Annually	<0.050	<0.050	ug/l	0.8	IGV	No	
		Antimony	Purged Sample	Annually	<1.0	<1.0	ug/l		IGV	No	
		Chromium	Purged Sample	Annually	4.1	4.1	ug/l	37.5	IGV	No	
		Copper	Purged Sample	Annually	3.6	3.6	ug/l	1500	IGV	No	
		Zinc	Purged Sample	Annually	33	33	ug/l	100	IGV	No	
	0-	_			N	N/-	_	_			
	G8	Temp.	Purged Sample	Quarterly	N/R	N/R	degrees C			No	
		DO	Purged Sample	Quarterly	N/R	N/R	% Saturation	N/A	IGV	No	
		pН	Purged Sample	Quarterly	N/R	N/R	рН	>6.0-<9.0	IGV	No	
		Conductivity	Purged Sample	Quarterly	N/R	N/R	uS/cm	1875	IGV	No	
		Ammonia	Purged Sample	Quarterly	N/R	N/R	mg/l	0.175	IGV	No	
		Chloride	Purged Sample	Quarterly	N/R	N/R	mg/l	187.5	IGV	No	
		Ortho- phosphate	Purged Sample	Annually	N/R	N/R	mg/l	0.035	IGV	No	
		TON	D 10 :		N/D	N/D	,,	No Abnormal	101/		
		TON	Purged Sample	Annually	N/R	N/R	mg/l	Change No	IGV	No	
		TOC	Purged Sample	Quarterly	N/R	N/R	mg/l	Abnormal Change	IGV	No	
		Alkalinity	Purged Sample	Annually	N/R	N/R	mg/l	200	DWS	No	

Groundwater/Soil monitoring template	Lic No:	W0026-03		Year	2015		
Fluoride Purged Sample Annually	/ N/R	N/R	mg/l	1	IGV	No	
Sulphate Purged Sample Annually	/ N/R	N/R	mg/l	187.5	IGV	No	
Coliforms Purged Sample Annually	/ N/R	N/R	no./100ml	0	IGV	No	
Aluminium Purged Sample Annually	/ N/R	N/R	ug/l	150	IGV	No	
Arsenic Purged Sample Annually	/ N/R	N/R	ug/l	7.5	IGV	No	
Barium Purged Sample Annually	/ N/R	N/R	ug/l		IGV	No	
Beryllium Purged Sample Annually	/ N/R	N/R	ug/l		IGV	No	
Boron Purged Sample Annually	/ N/R	N/R	ug/l	750	IGV	No	
Cadmium Purged Sample Annually	/ N/R	N/R	ug/l	3.8	IGV	No	
Calcium Purged Sample Annually	/ N/R	N/R	Mg/l	200	DWS	No	
Cobalt Purged Sample Annually	/ N/R	N/R	ug/l		IGV	No	
Iron Purged Sample Annually	/ N/R	N/R	ug/l	200	IGV	No	
Lead Purged Sample Annually	/ N/R	N/R	ug/l	18.8	IGV	No	
Magnesium Purged Sample Annually	/ N/R	N/R	mg/l	50	IGV	No	
Manganese Purged Sample Annually	/ N/R	N/R	ug/l	50	IGV	No	
Nickel Purged Sample Annually	/ N/R	N/R	ug/l	15	IGV	No	
Potassium Purged Sample Annually	/ N/R	N/R	mg/l	5	IGV	No	
Selenium Purged Sample Annually	/ N/R	N/R	ug/l		IGV	No	
Sodium Purged Sample Annually	/ N/R	N/R	mg/l	150	IGV	No	
Strontium Purged Sample Annually	/ N/R	N/R	ug/l		IGV	No	
Thallium Purged Sample Annually	/ N/R	N/R	ug/l		IGV	No	
Uranium Purged Sample Annually	/ N/R	N/R	ug/l	9	IGV	No	
Vanadium Purged Sample Annually	/ N/R	N/R	ug/l		IGV	No	
Mercury Purged Sample Annually	/ N/R	N/R	ug/l	0.8	IGV	No	
Antimony Purged Sample Annually	/ N/R	N/R	ug/l		IGV	No	
Chromium Purged Sample Annually	/ N/R	N/R	ug/l	37.5	IGV	No	
Copper Purged Sample Annually	/ N/R	N/R	ug/l	1500	IGV	No	
Zinc Purged Sample Annually	/ N/R	N/R	ug/l	100	IGV	No	
							j

Groundwater/Soil monitoring template W0026-03 2015 Lic No: Year please note exceedance of generic assessment criteria (GAC) such as a Groundwater Threshold Value (GTV) or an Interim Guideline Value (IGV) or an upward trend in results for a substance indicates that further interpretation of monitoring results is required. In addition to completing the above table, please **Groundwater monitoring template** complete the Groundwater Monitoring Guideline Template Report at the link provided and submit separately through ALDER as a licensee return or as otherwise instructed by the EPA. More information on the use of soil and groundwater standards/ generic assessment <u>Guidance on the Management of Contaminated Land and Groundwater at EPA Licensed Sites (EPA 2013).</u> criteria (GAC) and risk assessment tools is available in the EPA published guidance see the link in G31) Groundwater Drinking water **Depending on location of the site and proximity to other sensitive receptors alternative Receptor based Water Quality standards should be used in addition Surface regulations (private supply) <u>Drinking water (public Interim Guideline</u> 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 water EQS supply) standards Values (IGV) supply compare results to the Drinking Water Standards (DWS) GTV's standards

Table 3: Soil results

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

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

Environmental Liabilities template	Lic No:	W0026-03	Year	2015
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Click here to access EPA guidance on Environmental Liabilities and Financial provision

			Commentary
1	ELRA initial agreement status		
		Submitted and not agreed by EPA;	Completed and Submitted March 2011
2	ELRA review status	Review required and not completed;	
3	Amount of Financial Provision cover required as determined by the latest ELRA	€115,000	
4	Financial Provision for ELRA status	Submitted and agreed by EPA	
5	Financial Provision for ELRA - amount of cover	€200,000 up to 2016	
6	Financial Provision for ELRA - type	cash deposit	
7	Financial provision for ELRA expiry date	16/11/2046	
8	Closure plan initial agreement status	sure plan submitted and not agreed by I	PA
9	Closure plan review status	Review required and not completed	
10	Financial Provision for Closure status	Submitted and not agreed by EPA;	
11	Financial Provision for Closure - amount of cover	€4.3 million	To be revised in updated CRAMP
12	Financial Provision for Closure - type	cash deposit	
13_	Financial provision for Closure expiry date	16/11/2046	

	Environmental Management Programme/Continuous Improvement Programme	template	Lic No:	W0026-03	Year	2015
	Highlighted cells contain dropdown menu click to view		Additional Information		_	
1	Do you maintain an Environmental Mangement System (EMS) for the site. If yes, please detail in additional information	Yes				
2	Does the EMS reference the most significant environmental aspects and associated impacts on-site	Yes				
3	Does the EMS maintain an Environmental Management Programme (EMP) as required in accordance with the licence requirements	Yes				
4	Do you maintain an environmental documentation/communication system to inform the public on environmental performance of the facility, as required by the licence	Yes				

Environmental Management Programme (EMP) report										
Objective Category	Target	Status (% completed)	How target was progressed	Responsibility	Intermediate outcomes					
Reduction of emissions to Air	Complete Capping Works	100%	Capping was completed March	Section Head	Reduced emissions					
					Increased compliance with					
Energy Efficiency/Utility conservation	Landfill Gas Utilisation	60		Section Head	licence conditions					
SELECT		SELECT		SELECT	SELECT					

	N	loise monitor	ring summary	report			Lic No:	W0026-03	Year	2015	
	-	ce requirement fo	-	1?			Noise	Yes]		
"Checklist for	Was noise monitoring carried out using the EPA Guidance note, including completion of "Checklist for noise measurement report" included in the guidance note as table 6? Does your site have a noise reduction plan							Yes			
•		•	- 43					No Fatan data			
4 When was the noise reduction plan last updated? Have there been changes relevant to site noise emissions (e.g. plant or operational changes) since the last noise survey? Survey?											
Table N1: No	ise monitoring s	ummary									
Date of monitoring	Time period	Noise location (on site)	Noise sensitive location -NSL (if applicable)	LA _{eq}	LA ₉₀	LA ₁₀	LA _{max}	Tonal or Impulsive noise* (Y/N)	If tonal /impulsive noise was identified was 5dB penalty applied?	Comments (ex. main noise sources on site, & extraneous noise ex. road traffic)	Is <u>site</u> compliant with noise limits (day/evening/night)?
15/04/201	30 minutes	N1	N/A	49.6	40.3	51.5	72.9	No	No	M7 and N80 traffic noise	Yes
15/04/201	30 minutes	N2	N/A	50.7	41.1	58.8	75.6	No	No	Civic Amenity site and re	Yes
15/04/201	30 minutes	N3	N/A	60.5	48.8	66.8	73.5	No	No	N80 traffic is main sourc	No
15/04/201	30 minutes	N4	N/A	52.8	45.5	55.4	74.3	No	No	M7 and N80 traffic noise	Yes
*Please ensure th	at a tonal analysis has	been carried out as per	guidance note NG4. Th	ese records must b	e maintained on	site for future in	spection				

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

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

Any additional comments? (less than 200 words)

Resource Usage/Energy efficiency summary Lic No: W0026-03 Year 2015

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
Network (LIEN)
No

Additional information

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

Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional information

Table R1 Energy usage	e on site	1		
Energy Use	Previous year	Current year	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*
Total Energy Used (MWHrs)				
Total Energy Generated (MWHrs)				
Total Renewable Energy Generated (N	1WHrs)			
Electricity Consumption (MWHrs)	126	114.3	(-9%)	
Fossil Fuels Consumption:				
Heavy Fuel Oil (m3)	9	3.45	(-61.66%)	
Light Fuel Oil (m3)				
Natural gas (m3)				
Coal/Solid fuel (metric tonnes)				
Peat (metric tonnes)				
Renewable Biomass				
Renewable energy generated on site				

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

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

Table R2 Water usage	e on site				Water Emissions Water Consumption		
	Water extracted		,	consumption i, io	Volume Discharged	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 ³ yr):	m3/yr	Unaccounted for Water:
Groundwater	0						
Surface water	0						
Public supply	190						
Recycled water							
Total							

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

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

Table R3 Waste Stream					
	Total	Landfill	Incineration	Recycled	Other
Hazardous (Tonnes)					
Non-Hazardous (Tonnes)					

Resource Usage/Energy efficiency summary 2015 Lic No: W0026-03 Year Table R4: Energy Audit finding recommendations Description of Predicted energy Status and Date of audit Recommendations Measures proposed Origin of measures savings % Implementation date Responsibility Completion date comments SELECT SELECT SELECT

Table R5: Power Generation: Where p	ower is generated onsite	(e.g. power generation	1 facilities/food and	drink industry)please	complete the following	information
					Charles Takel	

	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:	W0026-03	Year	2015	
Complaints						
		Additional informa	ation			
Have you received any environmental complaints in the current reporting year? If yes please complete summary						
details of complaints received on site in table 1 below	No					

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

	Incidents			
				Additional information
Have any incidents occurred on site in the current report	rting year? Please list all incide	ents for current reporting		
year in Tab	le 2 below		SELECT	
*For information on how to report and what				
constitutes an incident	What is an incident			

Table 2 Incidents sun	ble 2 Incidents summary													
						Other	Activity in				Preventative			
			Incident category*please			cause(please	progress at time			Corrective action<20	action <20		Resolution	Likelihood of
Date of occurrence	Incident nature	Location of occurrence	refer to guidance	Receptor	Cause of incident	specify)	of incident	Communication	Occurrence	words	words	Resolution status	date	reoccurence
	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
Takal accordance of														

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

WASTE SUMMARY
LIC NO: W0026-03 Year 2015

SECTION A-PRTR ON SITE WASTE TREATMENT AND WASTE TRANSFERS TAB- TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES PRITE flacility logon. dropdown list click to see options

	SECTION B- WASTE	ACCEPTED ONTO SITE-TO BE COI							
				- }	Additional Informatio	n			
	Were any wastes accente	d onto your site for recovery or disposal or	te generated within your houndaries is						
1	to be captured through P		te generated within your boundaries is	Yes	Public waste disposal	area & CA Site			
	If ves please enter details	in table 1 below							
	. , ,]			
2	Did your site have any rej	ected consignments of waste in the curren	t reporting year? If yes please giv	ve a brief explanation in the	e additional information		No		
3	Wası	vaste accepted onto your site that was gen	erated outside the Republic of Ir	eland? If ves nlease state th	ne quantity in tonnes in ad	ditional information	No		
	Table 1 Details of	e. as these w	ill have been re	ported in vo					
	Licenced annual	EWC code			Quantity of waste	Quantity of waste accepted in	Reduction/	Reason for	Packaging Conten
	tonnage limit for your			accepted	accepted in current	previous reporting year (tonnes)	Increase over	reduction/ increase	only applies if t
	site (total			Please enter an	reporting year (tonnes)		previous year +/ -	from previous	waste has a packa

	waste accepted onto your site that was gen					No			DTD		
Licenced annual	f waste accepted onto your s	Source of waste accepted		Quantity of waste	Quantity of waste accepted in	Reduction/	Reason for	Packaging Content (%)-	Disposal/Recovery or	0	Comments -
tonnage limit for your	EWC code	Source of waste accepted	accepted	accepted in current	previous reporting year (tonnes)	Increase over	reduction/ increase	only applies if the	treatment operation carried out	Quantity of waste	Comments -
			Please enter an		previous reporting year (tonnes)		from previous		at your site and the description	remaining on	
site (total				reporting year (tonnes)		previous year +/ - %		waste has a packaging			
tonnes/annum)			accurate and detailed			%	reporting year	component	of this operation	site at the end	
			description - which							of reporting	
			applies to relevant EWC							year (tonnes)	
			code								
	European Waste Catalogue EWC codes		European Waste								
			Catalogue EWC codes								
	CIVIC AMENITY SITE										
		20- MUNICIPAL WASTES									
		(HOUSEHOLD WASTE AND									
		SIMILAR COMMERCIAL,									
		INDUSTRIAL AND				1				1	1
		INSTITUTIONAL WASTES)									
		INCLUDING SEPARATELY	Biodegrable kitchen and								
	20 01 08	COLLECTED FRACTIONS	canteen waste	21.82	24.75				R3-Recycling/reclamation or orga	0	
	20 02 00	20- MUNICIPAL WASTES	conteen woste	21.02	24,73				no necycling/reclamation or orge	, and	
		(HOUSEHOLD WASTE AND									
		SIMILAR COMMERCIAL,									
		INDUSTRIAL AND									
		INSTITUTIONAL WASTES)									
		INCLUDING SEPARATELY									
	20 02 01		biodearable waste	42.18	217.26				R3-Recyclina/reclamation or orac	0	
	20 02 01	COLLECTED FRACTIONS	bioaegrabie waste	42.18	217.26				K3-Kecycling/reclamation or orga	U	
		15- WASTE PACKAGING:									
		ABSORBENTS, WIPING									
		CLOTHS, FILTER MATERIALS									
	45 04 04 00 04 04	AND PROTECTIVE CLOTHING	paper and cardboard	298.37	324.72				042.5		
	15 01 01, 20 01 01	NOT OTHERWISE SPECIFIED 20- MUNICIPAL WASTES	paper ana caraboara	298.37	324.72				R12-Exchange of waste for submi	0	
		(HOUSEHOLD WASTE AND				1				1	1
		SIMILAR COMMERCIAL,									
		INDUSTRIAL AND									
		INSTITUTIONAL WASTES)	l								
		INCLUDING SEPARATELY	glass and glass							_	
	15 01 07, 16 01 20	COLLECTED FRACTIONS	packaging	138.72	146.86		-		R5-Recycling/reclamation or other	0	
		15- WASTE PACKAGING;				1				1	1
		ABSORBENTS, WIPING				1				1	1
		CLOTHS, FILTER MATERIALS									
	45.04.04	AND PROTECTIVE CLOTHING							042.5 4	_	
	15 01 04	NOT OTHERWISE SPECIFIED	Metallic Packaging	47.32	45.02				R12-Exchange of waste for submi	0	
		20- MUNICIPAL WASTES									
		(HOUSEHOLD WASTE AND				1				1]
		SIMILAR COMMERCIAL,				1				1	1
		INDUSTRIAL AND									
		INSTITUTIONAL WASTES)									
		INCLUDING SEPARATELY				1				1]
	20 01 40	COLLECTED FRACTIONS	metals	136.74	168.06	1			R3-Recycling/reclamation or orga	0	

WASTE SUMMARY					Lic No:	Year	2015				
WASTE SOMMANT			1		EIC NO.	W0026-03	fedi	2015			
		15- WASTE PACKAGING;									
		ABSORBENTS, WIPING									
		CLOTHS, FILTER MATERIALS									
		AND PROTECTIVE CLOTHING									
	15 01 02, 20 01 39	NOT OTHERWISE SPECIFIED	plastic	247.62	354.12			R12-Exchange of waste for submi	0		
	13 01 02, 20 01 39	20- MUNICIPAL WASTES	piastic	247.02	334.12			N12-Exchange of waste for submit			
		(HOUSEHOLD WASTE AND									
		SIMILAR COMMERCIAL,									
		INDUSTRIAL AND									
		INSTITUTIONAL WASTES)									
		INCLUDING SEPARATELY									
	20 01 11	COLLECTED FRACTIONS	textiles	27.98	26.98			R12-Exchange of waste for submi	0		
	100111	COLLECTED TIMETIONS	icatines	27.30	20.50			M12 Exchange of waste for saami			
		16- WASTES NOT OTHERWISE									
	20 01 33	SPECIFIED IN THE LIST	lead batteries	0.58	0.6			R12-Exchange of waste for submi	0		
		20- MUNICIPAL WASTES									
		(HOUSEHOLD WASTE AND									
		SIMILAR COMMERCIAL,									
		INDUSTRIAL AND									
		INSTITUTIONAL WASTES)									
		INCLUDING SEPARATELY									
	20 03 07	COLLECTED FRACTIONS	bulky waste	70.64				D5- Specially engineered landfill	0		
		20- MUNICIPAL WASTES									
		(HOUSEHOLD WASTE AND									
		SIMILAR COMMERCIAL,									
		INDUSTRIAL AND									
		INSTITUTIONAL WASTES)									
		INCLUDING SEPARATELY									
	20 01 27	COLLECTED FRACTIONS	paint	11.38	15.62			R12-Exchange of waste for submi	0		
		16- WASTES NOT OTHERWISE									
	16 01 03	SPECIFIED IN THE LIST	tryes	17.1	17.76			R3-Recycling/reclamation or orga	0		
		13- OIL WASTES AND WASTES									
		OF LIQUID FUELS (except									
		edible oils, and those in									
	13 02 04, 16 01 07	chapters 05, 12 and 19)	Oil and oil filters	11.8	10.56			R13-Storage of waste pending an	0		
		17- CONSTRUCTION AND									
		DEMOLITION WASTES									
		(INCLUDING EXCAVATED SOIL	gypsum-based								
	17 08 02	FROM CONTAMINATED SITES)	constrcution materials	4.52				R5-Recycling/reclamation or othe	0		
	17 00 02	20- MUNICIPAL WASTES	constitution materials	4.32				N3-NECYCHING/TECHINICION OF OUTE			
		(HOUSEHOLD WASTE AND									
		SIMILAR COMMERCIAL,									
		INDUSTRIAL AND									
		INSTITUTIONAL WASTES)									
		INCLUDING SEPARATELY									
	20 03 01	COLLECTED FRACTIONS	mixed municple waste	1514.62				R13-Storage of waste pending an	0		
		19- WASTES FROM WASTE									
		MANAGEMENT FACILITIES,									
		OFF-SITE WASTE WATER									
		TREATMENT PLANTS AND THE									
		PREPARATION OF WATER									
		INTENDED FOR HUMAN									
		CONSUMPTION AND WATER									
	20 03 03	FOR INDUSTRIAL USE	street-cleaning residue	84.26				R13-Storage of waste pending an	0		
			landfill leachate other			1					
		07- WASTES FROM ORGANIC	than those mentioned								
	19 07 03	07- WASTES FROM ORGANIC CHEMICAL PROCESSES		2435				D8-Biological treatment not speci	0		

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

- 4 Is all waste processing infrastructure as required by your licence and approved by the Agency in place? If no please list waste processing infrastructure required onsite
- 5 Is all waste storage infrastructure as required by your licence and approved by the Agency in place? If no please list waste storage infrastructure required on site
- Coes your facility have relevant nuisance controls in place?
 Do you have an odour management system in place for your facility? If no why?
 Do you maintain a sludge register on site?

Table 2 Waste type and tonnage-landfill only

Waste types permitted for disposal	Authorised/licenced annual intake for disposal (tpa)	Actual intake for disposal in reporting year (tpa)	Remaining licensed capacity at end of reporting year (m3)	Comments
Household	28,400	958		
Construction &	500			
Demolition	300			
Industrial Non-	3.000			
Hazardous	3,000			

ELECT	
ELECT	
ELECT	
ELECT	
ELECT	

WASTE SUMMARY	Lic No:	W0026-03	Year	2015

Table 3 General information-Landfill only

Area ID	Date landfilling commenced	Date landfilling ceased	Currently landfilling	Private or Public Operated		Predicted date to cease landfilling	Licence permits asbestos	Is there a separate cell for asbestos?		Total disposal area occupied by waste	Lined disposal area occupied by waste	Unlined area	Comments on liner type
										SELECT UNIT	SELECT UNIT	SELECT UNIT	
Cell 8		Nov-12	No	Public	Non Hazardous		No	No	No				

Table 4 Environmental monitoring-landfill only Was meterological monitoring in compliance with Landfill Directive (LD) standard in reporting year the LD st Was topography under \$53(A)(5) of the site surveyed in reporting year reporting year

Topography is considered the same as 2013

					Area with waste that		
Are	a uncapped*	Area with temporary cap			should be permanently		
SELEC	T UNIT	SELECT UNIT	Area with final cap to LD Standard m2 ha, a	Area capped other	capped to date under licence	What materials are used in the cap	Comments
All Area	s Cannod	0		Entire landfill canno		Concrete	All areas Permantly

*please note this includes daily cover area

Table 6 Leachate-Landfill only

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



Volume of leachate in reporting year(m3)			Leachate (NH4) mass load (kg/annum)	Leachate (Chloride) mass load kg/annum		Specify type of leachate treatment	Comments
2435	164	470	206	613	None	Off Site Waste Wa	ter Treatment Plant

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
by LFG System ins	Power generated (MW/KWI)	Used on-site or to national grid	during the reporting year?	Comments
750 m3/hr	No	No	No	Gas is flared off



 $|\ \mathsf{PRTR\#:W0026}\ |\ \mathsf{Facility}\ \mathsf{Name:Kyletalesha}\ \mathsf{Landfill}\ |\ \mathsf{Filename:W0026_2015_D02}\ (\mathsf{1})\ (\mathsf{1}).xls\ |\ \mathsf{Return}\ \mathsf{Year:2015}\ |$

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Guidance to completing the PRTR workbook

PRTR Returns Workbook

	Version 1.1.19
REFERENCE YEAR	2015
1. FACILITY IDENTIFICATION	
Parent Company Name	
	Kyletalesha Landfill
PRTR Identification Number	
Licence Number	W0026-03
Classes of Activity	
No.	class_name
-	Refer to PRTR class activities below
	Clonsoughy
	Kyleclonhobert
Address 3	
Address 4	
	Laois
Country	
Coordinates of Location	
River Basin District	
NACE Code	
Main Economic Activity	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	
AER Returns Contact Email Address	kfarrell@laoiscoco.ie
AER Returns Contact Position	Landfill Manager
AER Returns Contact Telephone Number	087 7999945
AER Returns Contact Mobile Phone Number	087 7999945
AER Returns Contact Fax Number	
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	3
User Feedback/Comments	
Web Address	
2. PRTR CLASS ACTIVITIES	
Activity Number	Activity Name
5(d)	Landfills
5(c)	Installations for the disposal of non-hazardous waste
50.1	General
3. SOLVENTS REGULATIONS (S.I. No. 543 of 20	
Is it applicable?	No
Have you been granted an exemption?	
If applicable which activity class applies (as per	
Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being	
used ?	
4. WASTE IMPORTED/ACCEPTED ONTO SITE	Guidance on waste imported/accepted onto site
Do you import/accept waste onto your site for on-	
site treatment (either recovery or disposal	
antivition\ 2	

y or dispusein activities) ?

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

4.1 RELEASES TO AIR

Link to previous years emissions data

PRTR#: W0026 | Facility Name: Kyletalesha Landfill | Filename: W0026_2015_D02 (1) (1).xls | Return Year: 2015 |

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SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

02011	JA A . DECTOR OF EDITION RICH OF										
		RELEASES TO AIR	Please enter all quantities in this section in KGs								
		POLLUTANT	METHOD								
					Method Used						
	No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year		
					Gas Sim 2.5 Statistics &						
03		Carbon dioxide (CO2)	С	OTH	Site data	27607.619	296942.976	0.0	269335.357		
					Gas Sim 2.5 Statistics &						
01		Methane (CH4)	С	OTH	Site data	12333.66	547490.76	0.0	535157.1		
		* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button									

SECTION B - REMAINING PRTR POLITITANTS

				Please enter all quantities	in this section in KGs			
POLLUTANT				METHOD	QUANTITY			
				Method Used				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
15	Chlorofluorocarbons (CFCs)	С	OTH	Gas Sim 2.5 PI Report	0.0	4.4	7 0.0	4.47
14	Hydrochlorofluorocarbons (HCFCs)	С	OTH	Gas Sim 2.5 PI Report	0.0	3.17	7 0.0	3.17
	* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button							

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

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

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

ĺ	Additional Data Requested from Landfill operators
	For the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide summary data on landfill gas
	flared or utilised on their facilities to accompany the figures for total methane generated. Operators should only report their Net methane (0
	to the environment under T(total) KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:

Landfill: Please enter summary data on the quantities of methane flared and / or utilised
Total estimated methane generation (as per

Landfill:	Kyletalesha Landfill					
Please enter summary data on the						
quantities of methane flared and / or						
utilised			Met	hod Used		_
				Designation or	Facility Total Capacity	
	T (Total) kg/Year	M/C/E	Method Code	Description	m3 per hour	
Total estimated methane generation (as per						
site model)			OTH	Gas Sim 2.5 Statistics	N/A	
Methane flared	616683.0	M	OTH	Site data	750.0	(Total Flaring Capacity)
Methane utilised in engine/s	0.0				0.0	(Total Utilising Capacity)
Net methane emission (as reported in Section						
A above)	547490.76	С	OTH	Gas Sim 2.5 Statistics - Site	N/A	
						-

4.2 RELEASES TO WATERS

Link to previous years emissions data

| PRTR# : W0026 | Facility Name : Kyletalesha Landfill | Filename : W0026_2015_D02 (1) (1).xls | Return Year : 2015 |

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SECTION A: SECTOR SPECIFIC PRTR POLLUTANTS

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

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

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

SECTION B: REMAINING PRTR POLLUTANTS

	RELEASES TO WATERS		Please enter all quantities in this section in KGs								
F	OLLUTANT				QUANTITY						
				Method Used							
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year			
					0	0.0	0 0.0	0.0			

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

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

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

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

itv

4.3 RELEASES TO WASTEWATER OR SEWER

Link to previous years emissions data

| PRTR# : W0026 | Facility Name : Kyletalesha Landfill | Filename : W0026_2015_D02 (1) (1).xls | R

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SECTION A: PRTR POLLUTANTS

OFFSIT	E TRANSFER OF POLLUTANTS DESTINED FOR WASTE-	Please enter all quantities in this section in KGs							
	POLLUTANT		METHO	DD	QUANTITY				
			Me	thod Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) K	G/Year	F (Fugitive) KG/Year
					0.0		0.0	0.0	0.0

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

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

SESTION B. REIMARINO FOLESTANT Emissions (as required in your electrica)													
OFFSITE TRAN	SFER OF POLLUTANTS DESTINED FOR WASTE-V	Please enter all quantities in this section in KGs											
PO		METHO)D	QUANTITY									
			Met	hod Used									
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year					
					0.0) 0	0.0	0.0					

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

Link to previous years emissions data Page 5 of 8

4.4 RELEASES TO LAND

Link to previous years emissions data

PRTR#: W0026 | Facility Name: Kyletalesha Landfill | Filename: W0026_2015_D02 (1) (1).xls | Return Year: 2015 |

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SECTION A: PRTR POLLUTANTS

	RELEASES TO LAND		Please enter all quantities in this section in KGs						
PO		METHO	D				UANTITY		
			Meth	nod Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	Α	(Accidental) KG/	∕ear
					0.0)	0.0		0.0

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

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

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

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

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE | PRTR#: W0026 | Facility Name: Kyletalesha Landfill | Filename: W0026_2015_D02 (1) (1).xls | Return Year: 2015 |

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			Please enter	all quantities on this sheet in Tonnes			D02 (1) (1).XIS Return Te					
			Quantity (Tonnes per Year)				Method Used		Haz Waste: Name and Licence/Permit No of Next Destination Facility <u>Naz Waste</u> : 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 Destinati i.e. Final Recovery / Disposal Si (HAZARDOUS WASTE ONLY
Transfer Destination	European Waste Code	Hazardous		Description of Waste	Waste Treatment Operation	M/C/E	Method Used	Location of Treatment				
										0	Enva Ltd,W0184-	Enva Ltd,Clonminam
				mineral-based chlorinated engine, gear and					Enva Ireland Limited,W0184-		01,Clonminam Industrial Estate,Portlaoise,Laois,,,Irel	Industrial Estate, Portlaoise, Laois, Ire
Within the Country	13 02 04	Yes	10.16	lubricating oils	R9	М	Weighed	Offsite in Ireland		,Laois,Ireland	and	nd
										Cappincur,.,Tullamore,Co		
Within the Country	15 01 01	No	164.46	paper and cardboard packaging	R12	M	Weighed	Offsite in Ireland	AES Ireland,W0104-02	Offaly, Ireland Cappincur, ., Tullamore, Co		
Within the Country	15 01 02	No	95.98	plastic packaging	R12	M	Weighed	Offsite in Ireland	AES Ireland,W0104-02	Offaly, Ireland		
•							, and the second		Hammond Lane Metal Co.	Hammond Lane Metal Co.		
Mishin the Oncome	45.04.04	NI-	47.00		D40		Mainhad	O#-it- i- lld	(Pigeon House),WFP-DC-09-			
Within the Country	15 01 04	No	47.32	metallic packaging	R12	М	Weighed	Offsite in Ireland	0013-01	, Dublin 4 ,.,Ireland		
										Unit 4 Osberstown Industrial		
Mish: 4b - O	45.04.07	No	400.54	-1	R5	М	Mainhad	O#-it- i- lld	Rehab Glassco Limited,W0279-02	Park ,Caragh Road ,Naas Co Kildare,Ireland		
Within the Country	15 01 07	INO	120.54	glass packaging	СЭ	IVI	Weighed	Offsite in freiand	Liffilled, WO279-02	Crumb Rubber Ireland Itd		
										,Mooretown , Dromiskin		
									Crumb Rubber ,WFP-LH-10-	, Dundalk		
Within the Country	16 01 03	No	17.1	end-of-life tyres	R3	М	Weighed	Offsite in Ireland		Co.Louth,Ireland		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				landfill leachate other than those mentioned					Portlaoise Wastewater	Ridge Road,.,Portlaoise,Co		
Within the Country	19 07 03	No	2435.0	in 19 07 02	D8	М	Weighed	Offsite in Ireland	Treatment Plant,D0001-01	Laois,Ireland Cappincur,.,Tullamore,Co		
Within the Country	20 01 01	No	151.91	paper and cardboard	R12	M	Weighed	Offsite in Ireland	AES Ireland.W0104-02	Offalv.Ireland		
, , , , , , , , , , , , , , , , , , , ,				1-1			- J			Kilmainhamwood Compost		
									Padraig Thornton Wasto	,Ballynalurgan ,		
Within the Country	20 01 08	No	21.82	biodegradable kitchen and canteen waste	R3	М	Weighed	Offsite in Ireland	Padraig Thornton Waste Disposal Limited, W0195-02	Kilmainhamwood ,Kells Co Meath,Ireland		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,									.,,	504 Grants		
										Drive, Greenogue Business		
Within the Country	20 01 11	No	27.98	textiles	R12	М	Weighed	Offsite in Ireland	Textile Recycling Limited,.	Park, Greenogue Industrial Estate, Dublin, Ireland		
Triamir and Country	200111		27.00	toxiio c	2		Troigilou	Onoko in molana	roxillo recoyoling Elimica,	Zotato, Dabiiri, irolaria	KMK Metals,W0113-	
				batteries and accumulators included in 16						One-in-sur-la-durateint Enteta	03,Cappincur Industrial	Cappincur Industrial
				06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing					KMK Metals Recycling	Cappincur Industrial Estate ,Daingean Road Tullamore	Estate, Daingean Road, Tullamore, Offaly, Irelan	Estate, Daingean Road, Tullamore, Offaly, Ire
Within the Country	20 01 33	Yes	0.58	these batteries	R12	M	Weighed	Offsite in Ireland	Limited,W0113-04	Co Offaly,,,,,Ireland	d	d
Mishin the Country	00.04.00	NI-	454.04	-14:	D40		Mainhad	Official in Inclased	AEC Included MO404 00	Cappincur,.,Tullamore,Co		
Within the Country	20 01 39	No	151.64	plastics	R12	М	Weighed	Oitsite in Ireland	AES Ireland,W0104-02	Offaly,Ireland Cappincur,.,Tullamore,Co		
Within the Country	20 01 40	No	136.74	metals	R12	M	Weighed	Offsite in Ireland	AES Ireland,W0104-02	Offaly,Ireland		
										Dord no Méno (Kilhar-i)		
										Bord na Móna (Kilberry), Kilberry, Athy Co		
Within the Country	20 02 01	No	42.18	biodegradable waste	R3	M	Weighed	Offsite in Ireland	Bord Na Mona,W0198-01	Kildare,,Ireland		
									Connon Foo W/FD W/M	Split Hill		
Within the Country	16 01 20	No	12 18	glass	R5	М	Weighed	Offsite in Ireland	Gannon Eco ,WFP-WM- 2009-0007-01	Quarries,Ballinagore,Co Westmeath,Ireland		
			.2.10	3				2.iono in incluita	Bord na Mona Public Limited			
									Company/Drehid Waste	Killinagh Lower and Killinagh		
Within the Country	20.03.07	No	70.64	bulky waste	D5	М	Weighed	Offsite in Ireland	Management Facility,W0201- 03	- Upper ,Carbury , County Kildare,.,Ireland		
Within the Country	20 00 01	140	70.04	bully waste	20	141	TTOIGHEU	Challe in heland	00	raidaro,,,irolaria		

_													
		European Waste		Quantity (Tonnes per Year)		Waste Treatment		Method Used	Location of	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)
-	Fransfer Destination	Code	Hazardous		Description of Waste		M/C/F	Method Used	Treatment				
-	Tanoror Bootmation	0000	r idzardodo		Boom Front of Tradio	Орогалог	111 O/ E	mouned cood	rrodunon			RD Recycling,Ovam	
											Clonminam Industrial Estate		Centrum
										Enva Ireland Limited, W0184-			Zuid,3017,Houthalen,B3530,
١	Vithin the Country	16 01 07	Yes	1.64	oil filters	R12	M	Weighed	Offsite in Ireland	02		Belgium	Belgium
	· ·									Gypsum Recycling		S .	S .
					gypsum-based construction materials other					Ireland, Waste Permit No.	Tullamore, Co.Offaly		
١	Vithin the Country	17 08 02	No	4.52	than those mentioned in 17 08 01	R5	M	Weighed	Offsite in Ireland	238/2006	,,,,,Ireland		
											Advanced Environmental		
											Solutions (Ireland) Ltd		
											Kyletalesha &		
											Kyleclonhobert ,Portlaoise		
١	Vithin the Country	20 03 01	No	1514.62	mixed municipal waste	R12	M	Weighed	Offsite in Ireland	AES - Portlaoise ,W0194-02			
											Advanced Environmental		
											Solutions (Ireland) Ltd		
											Kyletalesha &		
	With in the Original	00.00.00	No	04.00	street-cleaning residues	R12	М	Weighed	O#=:t= := !==!===	AES - Portlaoise ,W0194-02	Kyleclonhobert ,Portlaoise		
'	Vithin the Country	20 03 03	NO	84.26	street-cleaning residues	R12	IVI	vveigned	Offsite in Ireland	AES - Portiaoise ,vvo 194-02	County Laois,,,ireland	Recyfuel S.A,Belgian	
												Authorities Permitted, Zoning	
											Clonminam Industrial Estate		Zoning Industriel d'Ehein ,B-
					paint, inks, adhesives and resins containing					Enva Ireland Limited, W0184-		, , , , , , , , , , , , , , , , , , , ,	4480. ENGIS BELGIUM.B-
١	Vithin the Country	20 01 27	Yes			R12	M	Weighed	Offsite in Ireland		,Laois,Ireland		4480,Belgium

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

Link to previous years waste data
Link to previous years waste summary data & percentage change
Link to Waste Guidance