Facility Information Sumi	mary		
AER Reporting Year	2012		
Licence Register Number	P0224-02		•
Name of site		Analog	Devices International
Site Location		Raheen Indu	strial Estate, Raheen, Limerick
NACE Code			2611
Class/Classes of Activity	13.2 The m	anufacture of ir	ntegrated circuits and printed circuit boards
National Grid Reference (6E, 6 N)		52°37	7'55.2"N. 8°39'28.8"W

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.

Analog Devices International designs, develops, manufactures and markets high-performance analog, mixed-signal, and digital signal processing (DSP) integrated circuits (IC's) used in signal processing applications. The core manufacturing process carried out at the Limerick facility is Wafer Fabrication. In Wafer Fabrication Integrated Circuits (IC's) are fabricated on a wafer (a thin disc of silicon). Between 300 and 30000 IC's are fabricated on a single wafer, measuring 8" in diameter. In 2012 there was a slight decrease in production output versus the previous reporting year. There were some infrastructural changes in the 2012 reporting year. Two buildings were demolished on the Analog Devices site (Building 3 and Building 4) This project began in May 2012. A new natural gas boiler was purchased to accommodate additional energy requirements for the site going forward. The new boiler will be commissioned in 2013 and operated in full compliance with Conditions 5.6 and 5.7 of the licence. During 2012 there were two emission limit value exceedances for effluent (Ammonia and Sulphate) Both exceedances were investigated and corrective actions were put in place to ensure future compliance.

### **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.

	intermation is assured to meet heenee requiren
Signature Group/Facility manager	Date
(or nominated, suitably qualified and experienced deputy)	

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Answer all questions and complete all tables where relevant				
Does your site have licensed air emissions? If yes please complete table A1 and A2 below for the  current reporting year and answer further questions. If you do not have licenced emissions and do not complete a solvent management plan (table A4 and A5) you do not need to complete the tables	Yes		Additional information	
Periodic/Non-Continuous Monitoring				
Are there any results in breach of licence requirements? If yes please provide brief details in the comment section of TableA1 below	No			
Was all monitoring carried out in accordance with EPA guidance note AG2 and using the basic air monitoring checklist?	Yes	Axis Environmental	Services carry out the Analog Devices air monitoring	

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

Emission reference no:			ELV in licence or any revision therof	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence limit	Method of analysis	Annual mass load (kg)	Comments - reason for change in % mass load from previous year if applicable
SC01B3	volumetric flow	16/17/01/12	64800	100 % of values < ELV	42292	Nm3/hour	yes	ОТН		
SC01B3	volumetric flow	10/11/12/04/12	64800	100 % of values < ELV	45754	Nm3/hour	yes	отн		
SC01B3	volumetric flow	10/11/07/12	64800	100 % of values < ELV	48686	Nm3/hour	yes	отн		
SC01B3	volumetric flow	02/12/10/12	64800	100 % of values < ELV	40611	Nm3/hour	yes	отн		
SC01B3	Total acids	16/17/01/12	5	100 % of values < ELV	0.937	mg/Nm3	yes	EN 1911-1 to 3:2003	Total acids = 763.38	
SC01B3	Total acids	10/11/12/04/12	5	100 % of values < ELV	1.007	mg/Nm3	yes	EN 1911-1 to 3:2003		
SC01B3	Total acids	10/11/07/12	5	100 % of values < ELV	0.341	mg/Nm3	yes	EN 1911-1 to 3:2003		
SC01B3	Total acids	02/12/10/12	5	100 % of values < ELV	0.165	mg/Nm3	yes	EN 1911-1 to 3:2003		
SC01B3	Fluorine and inorganic compounds (as HF)	16/17/01/12	0.2	100 % of values < ELV	0.008	mg/Nm3	yes	ISO/DIS 15713:2004	Total fluorides as HF = 9.181	
SC01B3	Fluorine and inorganic compounds (as HF)	10/11/12/04/12	0.2	100 % of values < ELV	0.016	mg/Nm3	yes	ISO/DIS 15713:2004		
SC01B3	Fluorine and inorganic compounds (as HF)	10/11/07/12	0.2	100 % of values < ELV	0.005	mg/Nm3	yes	ISO/DIS 15713:2004		
SC01B3	Fluorine and inorganic compounds (as HF)	02/12/10/12	0.2	100 % of values < ELV	0.002	mg/Nm3	yes	ISO/DIS 15713:2004		

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	TA Luft inorganic dust								
SC01B3	particles class 2	10/11/12/04/12	n/a 100 % of value	s < ELV 0.00	18 mg/Nm3	yes	EN 14385:2004	Total TA Luft inorganic dust = 12.32	
	TA Luft inorganic dust								
SC01B3	particles class 2	10/11/07/12	n/a 101 % of value	s < ELV 0.00	21		EN 14385:2004		
	TA Luft inorganic dust								
SC01B3	particles class 3	10/11/12/04/12	0.5 100 % of value	s < ELV 0.00	48 mg/Nm3	yes	EN 14385:2004		
	TA Luft inorganic dust								
SC01B3	particles class 3	10/11/07/12	0.5 100 % of value	s < ELV 0.00	146 mg/Nm3	yes	EN 14385:2004		
SC01B3	Dust	10/11/12/04/12	30 100 % of value	s < ELV 0	.03 mg/Nm3	yes	отн	Total dust = 73.552	
SC01B3	Dust	10/11/07/12	30 100 % of value	s < ELV 0	.04 mg/Nm3	yes	отн		
SC02B3	volumetric flow	16/17/01/12	64800 100 % of value	s < ELV 412	03 Nm3/hour	yes	ОТН		
		T							
SC02B3	volumetric flow	10/11/07/12	64800 100 % of value	s < ELV 428	25 Nm3/hour	yes	ОТН		
SC02B3	volumetric flow	10/11/07/12	64800 100 % of value	s < ELV 447	07 Nm3/hour	yes	отн		
SC02B3	volumetric flow	02/12/10/12	64800 100 % of value	s < ELV 432	81 Nm3/hour	yes	отн		
SC02B3	Total acids	16/17/01/12	5 100 % of value	s < ELV 0.0	16 mg/Nm3	ves	EN 1911-1 to 3:2003		
SC02B3	Total acids	10/11/07/12	5 101 % of value	s < ELV 0.1	84 mg/Nm3	ves	EN 1911-1 to 3:2003		
SC02B3	Total acids	10/11/07/12	5 102 % of value	s < ELV 0.4	35 mg/Nm3	ves	EN 1911-1 to 3:2003		
SC02B3	Total acids	02/12/10/12	5 103 % of value	s < ELV 0.2	255 mg/Nm3	ves	EN 1911-1 to 3:2003		
	Fluorine and inorganic								
SC02B3	compounds (as HF)	16/17/01/12	0.2 100 % of value	s < ELV 0.0	05 mg/Nm3	yes	ISO/DIS 15713:2004		
		.,,,	5.2 257.751 Value	0.0		100	,		
SC02B3	Fluorine and inorganic compounds (as HF)	10/11/12/04/12	0.2 100 % of value	s < ELV 0.0	13 mg/Nm3	ves	ISO/DIS 15713:2004		
		, , , , , , , , , ,		0.0	J				
SC02B3	Fluorine and inorganic compounds (as HF)	10/11/07/12	0.2 100 % of value	S < FLV 0.0	002 mg/Nm3	ves	ISO/DIS 15713:2004		
		, 11,0,,12	O.E 100 % of Value			700	157,015 157151200 1		
SC02B3	Fluorine and inorganic compounds (as HF)	02/12/10/12	0.2 100 % of value	S < FLV 0.0	03 mg/Nm3	yes	ISO/DIS 15713:2004		
		, 12, 10, 12	o.E 100 % of Value	0.0		,00			
SC02B3	TA Luft inorganic dust particles class 2	10/11/12/04/12	n/a 100 % of value	S < FLV 0.00	22 mg/Nm3	ves	EN 14385:2004		
		, 11, 12, 01, 12	ily a 200 % of Value	0.00		,00	2.12.1303.12001		
SC02B3	TA Luft inorganic dust particles class 2	10/11/07/12	n/a 100 % of value	0.00	25 mg/Nm3	yes	EN 14385:2004		
550203		10/11/0//12	ii, a 100 % oi Value	0.00	- IIIg/IIIIJ	yes	EN 14303.2004		
SC02B3	TA Luft inorganic dust particles class 3	10/11/12/04/12	0.5 100 % of value	S FIV	58 mg/Nm3	yes	EN 14385:2004		
300203		10/11/12/04/12	0.5 100 % OI Value	0.00	Jo Hig/IVIIIJ	yes	LIV 14303.2004		
	TA Luft inorganic dust								
scoapa		10/11/07/12	0.5.100 % of value	S ELV	06 mg/Nm2	voc	EN 14295-2004		
SC02B3	particles class 3	10/11/07/12	0.5 100 % of value	s < ELV 0.0	06 mg/Nm3	yes	EN 14385:2004		

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		40/44/07/40		400.0% 6 1	0.05	/h. 2				
SC02B3	Total Particulates	10/11/07/12	30	100 % of values < ELV	0.05	mg/Nm3	yes	отн		+
SC03B3	volumetric flow	16/17/01/12	15000	100 % of values < ELV	11155	Nm3/hour	yes	ОТН		
	volumetric flow	40/44/40/04/40	45000	100 % 6 1 51 %	40000			071		
SC03B3	volumetric flow	10/11/12/04/12	15000	100 % of values < ELV	10882	Nm3/hour	yes	отн		
SC03B3	volumetric flow	10/11/07/12	15000	100 % of values < ELV	13510	Nm3/hour	yes	отн		4
SC03B3	volumetric flow	02/12/10/12	15000	100 % of values < ELV	0422	Nm3/hour	ves	ОТН		
300363	volumetric now	02/12/10/12	15000	100 % Of Values < ELV	5422	MIIIS/IIOUI	yes	OTH		T
SC03B3	Total acids	16/17/01/12	5	100 % of values < ELV	0.012	mg/Nm3	yes	EN 1911-1 to 3:2003		4
SC03B3	Total acids	10/11/12/04/12	5	100 % of values < ELV	0.3	mg/Nm3	ves	EN 1911-1 to 3:2003		
300303	Total acids	10/11/12/04/12		100 /0 01 Value3 < 22 V	0.5	ilig/Will3	yes	EN 1311 1 to 3.2003		T
SC03B3	Total acids	10/11/07/12	5	100 % of values < ELV	0.513	mg/Nm3	yes	EN 1911-1 to 3:2003		4
SC03B3	Total acids	02/12/10/12	5	100 % of values < ELV	0.455	mg/Nm3	ves	EN 1911-1 to 3:2003		
300303	Fluorine and inorganic	02/12/10/12		200 70 01 Values 4 224			765	EN 1311 1 to 312003		T
SC03B3	compounds (as HF)	16/17/01/12	0.4	100 % of values < ELV	0.005	mg/Nm3	yes	ISO/DIS 15713:2004		4
SC03B3	Fluorine and inorganic compounds (as HF)	10/11/12/04/12	0.4	100 % of values < ELV	0.01	mg/Nm3	ves	ISO/DIS 15713:2004		
	Fluorine and inorganic									
SC03B3	compounds (as HF)	10/11/07/12	0.4	100 % of values < ELV	0.003	mg/Nm3	yes	ISO/DIS 15713:2004		+
SC03B3	Fluorine and inorganic compounds (as HF)	02/12/10/12	0.4	100 % of values < ELV	0.002	mg/Nm3	yes	ISO/DIS 15713:2004		
SC03B3	Hydrogen bromide	16/17/01/12	5	100 % of values < ELV	0.006	mg/Nm3	yes	ОТН		+
SC03B3	Hydrogen bromide	10/11/12/04/12	5	100 % of values < ELV	0.004	mg/Nm3	yes	отн		
SC03B3	Hydrogen bromide	10/11/07/12	5	100 % of values < ELV	0.002	mg/Nm3	yes	ОТН		+
SC03B3	Hydrogen bromide	02/12/10/12	5	100 % of values < ELV	0.002	mg/Nm3	yes	отн		
	TA Luft inorganic dust	40/44/40/04/:-		400.00		44. 2				
SC03B3	particles class 2  TA Luft inorganic dust	10/11/12/04/12	0.01	100 % of values < ELV	0.0016	mg/Nm3	yes	EN 14385:2004		H
SC03B3	particles class 2	10/11/07/12	0.01	100 % of values < ELV	0.0021	mg/Nm3	yes	EN 14385:2004		
SC03B3	TA Luft inorganic dust	10/11/12/04/12		100 % of values - 5114	0.0040	mg/Nm2		EN 14395-3004		
2CU3B3	particles class 3  TA Luft inorganic dust	10/11/12/04/12	0.5	100 % of values < ELV	0.0043	mg/Nm3	yes	EN 14385:2004		
SC03B3	particles class 3	10/11/07/12	0.5	100 % of values < ELV	0.0047	mg/Nm3	yes	EN 14385:2004		4
SC03B3	Dust	10/11/12/04/12	nc	100 % of values < ELV	0.00	mg/Nm3	yes	ОТН		
300303	Dust	10/11/12/04/12	30	100 % Of Values \ LLV	0.03	iiig/iviii3	yes			T
SC03B3	Dust	10/11/07/12	30	100 % of values < ELV	0.04	mg/Nm3	yes	отн		

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SC04F2	volumetric flow	16/17/01/12	4000	100 % of values < ELV	3624	Nm3/hour	yes	отн		
SC04F2	volumetric flow	10/11/12/04/12	4000	100 % of values < ELV	2583	Nm3/hour	yes	ОТН		
SC04F2	volumetric flow	10/11/07/12	4000	100 % of values < ELV	3714	Nm3/hour	yes	ОТН		
SC04F2	volumetric flow	02/12/10/12	4000	100 % of values < ELV	3838	Nm3/hour	yes	ОТН		
SC04F2	Total acids	16/17/01/12	10	100 % of values < ELV	1.83	mg/Nm3	yes	EN 1911-1 to 3:2003		
550453	Takal asida	10/11/12/04/12	10	400 % of welves 4 FIV	1.15	/N 2		EN 1911-1 to 3:2003		
SC04F2	Total acids	10/11/12/04/12	10	100 % of values < ELV	1.15	mg/Nm3	yes	EN 1911-1 to 3:2003		
SC04F2	Total acids	10/11/07/12	10	100 % of values < ELV	0.144	mg/Nm3	yes	EN 1911-1 to 3:2003		
JUJ41 L	.otaracius	10/11/0//12	10	250 70 OF VAIACS V LEV	0.144		yes	24 1511 1 to 5.2005		
SC04F2	Total acids	02/12/10/12	10	100 % of values < ELV	0.132	mg/Nm3	ves	EN 1911-1 to 3:2003		
500 H E	Fluorine and inorganic	02/12/10/12	10	200 70 01 Valde5 1 224		1115/11113	765	EN 1911 1 to 5.E009		
SC04F2	compounds (as HF)	16/17/01/12	0.4	100 % of values < ELV	0.022	mg/Nm3	yes	ISO/DIS 15713:2004		
	Fluorine and inorganic									
SC04F2	compounds (as HF)	10/11/12/04/12	0.4	100 % of values < ELV	0.024	mg/Nm3	yes	ISO/DIS 15713:2004		
	Fluorine and inorganic									
SC04F2	compounds (as HF)	10/11/07/12	0.4	100 % of values < ELV	0.03	mg/Nm3	yes	ISO/DIS 15713:2004		
	Fluorine and inorganic									
SC04F2	compounds (as HF)	02/12/10/12	0.4	100 % of values < ELV	0.023	mg/Nm3	yes	ISO/DIS 15713:2004		
SC04F2	Hydrogen bromide	16/17/01/12	5	100 % of values < ELV	1.167	mg/Nm3	yes	ОТН	Total Bromides as HBR = 10.03	
SC04F2	Hydrogen bromide	10/11/12/04/12		100 % of values < ELV	0.033	mg/Nm3	yes	OTH		
		10/11/07/12	_	400 07 6 1	0.004	44. 0		0711		
SC04F2	Hydrogen bromide	10/11/07/12		100 % of values < ELV	0.021	mg/Nm3	yes	ОТН		
SC04F2	Hydrogen bromide	02/12/10/12		100 % of values < ELV	0.023	mg/Nm3	ves	отн		
300 TI E	nyarogen bronniae	02,12,10,12		200 /2 OI VAIACS \ EEV	0.020	ь/нипэ	yes	· · · ·		
SCO6G3	volumetric flow	10/11/07/12	1545	100 % of values < ELV	43	Nm3/hour	ves	отн		
			-515		.,		1**			
SCO6G3	Total acids	10/11/07/12	5	100 % of values < ELV	2.415	mg/Nm3	yes	EN 1911-1 to 3:2003		
	Fluorine and inorganic									
SCO6G3	compounds (as HF)	10/11/07/12	5	100 % of values < ELV	0.041	mg/Nm3	yes	ISO/DIS 15713:2004		
SC07B3	volumetric flow	16/17/01/12	64800	100 % of values < ELV	41705	Nm3/hour	yes	отн		
SC07B3	volumetric flow	10/11/12/04/12	64800	100 % of values < ELV	38516	Nm3/hour	yes	ОТН		
SC07B3	volumetric flow	10/11/07/12	64800	100 % of values < ELV	38394	Nm3/hour	yes	OTH		

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SC07B3	Total acids	16/17/01/12	5	100 % of values < ELV	1.033	mg/Nm3	yes	EN 1911-1 to 3:2003		
SC07B3	Total acids	10/11/12/04/12	5	100 % of values < ELV	1 636	mg/Nm3	yes	EN 1911-1 to 3:2003		
500785	Total acids	10/11/12/04/12		100 70 01 Value3 < EEV	1.050	mg/iiii3	yes	EN 1311 1 to 3.2003		
SC07B3	Total acids	10/11/07/12	5	100 % of values < ELV		mg/Nm3	yes	EN 1911-1 to 3:2003		
560703		00/40/40/40	_	4000/ 6 1	0.095	/2. 2		5114444 1 2 2002		
SC07B3	Total acids	02/12/10/12	5	100 % of values < ELV		mg/Nm3	yes	EN 1911-1 to 3:2003		
SC07B3	Fluorine and inorganic compounds (as HF)	16/17/01/12	0.2	100 % of values < ELV	0.002	mg/Nm3	yes	ISO/DIS 15713:2004		
	Fluorine and inorganic									
SC07B3	compounds (as HF)	10/11/12/04/12	0.2	100 % of values < ELV	0.013	mg/Nm3	yes	ISO/DIS 15713:2004		
SC07B3	Fluorine and inorganic compounds (as HF)	10/11/07/12	0.2	100 % of values < ELV	0.002	mg/Nm3	yes	ISO/DIS 15713:2004		
	Fluorine and inorganic						7.5			
SC07B3	compounds (as HF)	02/12/10/12	0.2	100 % of values < ELV	0.002	mg/Nm3	yes	ISO/DIS 15713:2004		
	TA Luft inorganic dust	40/44/40/04/40	,	4000/ 6 1	0.0004	/2. 2		51144305 2004		
SC07B3	particles class 2	10/11/12/04/12	n/a	100 % of values < ELV	0.0021	mg/Nm3	yes	EN 14385:2004		
SC07B3	TA Luft inorganic dust particles class 2		n/a	100 % of values < ELV	0.0019	mg/Nm3	yes	EN 14385:2004		
	TA Luft inorganic dust									
SC07B3	particles class 3	10/11/12/04/12	0.5	100 % of values < ELV	0.0053	mg/Nm3	yes	EN 14385:2004		
SC07B3	TA Luft inorganic dust particles class 3		0.5	100 % of values < ELV	0.0044	mg/Nm3	yes	EN 14385:2004		
SC07B3	Dust	10/11/12/04/12	30	100 % of values < ELV	0.04	mg/Nm3	yes	отн		
SC07B3	Dust		20	100 % of values < ELV	0.04	mg/Nm3	ves	отн		
300763	Dust		30	100 % Of Values < ELV	0.04	IIIg/IVIII5	yes	OTH		
SC08B3	volumetric flow	10/11/12/04/12	64800	100 % of values < ELV	18447	Nm3/hour	yes	отн		
SC08B3	volumetric flow	10/11/07/12	64800	100 % of values < ELV	39177	Nm3/hour	yes	ОТН		
SC08B3	volumetric flow	02/12/10/12	64800	100 % of values < ELV	4744	Nm3/hour	yes	отн		
SC08B3	Total acids	10/11/12/04/12	5	100 % of values < ELV	0.396	mg/Nm3	yes	EN 1911-1 to 3:2003		
SC08B3	Total acids	10/11/07/12	5	100 % of values < ELV	0.23	mg/Nm3	ves	EN 1911-1 to 3:2003		
		.,,,			0.23	0,	1			
SC08B3	Total acids	02/12/10/12	5	100 % of values < ELV	0.166	mg/Nm3	yes	EN 1911-1 to 3:2003		
ccoops	Fluorine and inorganic	10/11/12/04/12		100 % of column 4 FLV		/N		ISO (DIS 45742-2004		
SC08B3	compounds (as HF)	10/11/12/04/12	0.2	100 % of values < ELV	0.003	mg/Nm3	yes	ISO/DIS 15713:2004		
SC08B3	Fluorine and inorganic compounds (as HF)	10/11/07/12	0.2	100 % of values < ELV	0.001	mg/Nm3	yes	ISO/DIS 15713:2004		
	Fluorine and inorganic	T								
SC08B3	compounds (as HF)	02/12/10/12	0.2	100 % of values < ELV	0.001	mg/Nm3	yes	ISO/DIS 15713:2004		

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SC08B3	TA Luft inorganic dust particles class 2	10/11/12/04/12	n/a	100 % of values < ELV	0.0016	mg/Nm3	yes	EN 14385:2004		
SC08B3	TA Luft inorganic dust particles class 2	10/11/07/12	n/a	100 % of values < ELV	0.0019	mg/Nm3	yes	EN 14385:2004		
SC08B3	TA Luft inorganic dust particles class 3	10/11/12/04/12	0.5	100 % of values < ELV	0.0041	mg/Nm3	yes	EN 14385:2004		
SC08B3	TA Luft inorganic dust particles class 3	10/11/07/12	0.5	100 % of values < ELV	0.0043	mg/Nm3	yes	EN 14385:2004		
5C08B3	Dust	10/11/12/04/12	30	100 % of values < ELV	0.03	mg/Nm3	yes	отн		
5C08B3	Dust	10/11/07/12	30	100 % of values < ELV	0.03	mg/Nm3	yes	отн		
5C09B3	volumetric flow	16/17/01/12	64800	100 % of values < ELV	46641	Nm3/hour	yes	отн		
6C09B3	volumetric flow	10/11/12/04/12	64800	100 % of values < ELV	49435	Nm3/hour	yes	ОТН		
6C09B3	volumetric flow	10/11/07/12	64800	100 % of values < ELV	42427	Nm3/hour	yes	ОТН		
6C09B3	volumetric flow	02/12/10/12	64800	100 % of values < ELV	53115	Nm3/hour	yes	ОТН		
6C09B3	Total acids	16/17/01/12	5	100 % of values < ELV	0.104	mg/Nm3	yes	EN 1911-1 to 3:2003		
5C09B3	Total acids	10/11/12/04/12	5	100 % of values < ELV	0.473	mg/Nm3	yes	EN 1911-1 to 3:2003		
SC09B3	Total acids	10/11/07/12	5	100 % of values < ELV	0.353 0.596	mg/Nm3	yes	EN 1911-1 to 3:2003		
5C09B3	Total acids	02/12/10/12	5	100 % of values < ELV		mg/Nm3	yes	EN 1911-1 to 3:2003		
5C09B3	Fluorine and inorganic compounds (as HF)	16/17/01/12	0.2	100 % of values < ELV	0.004	mg/Nm3	yes	ISO/DIS 15713:2004		
6C09B3	Fluorine and inorganic compounds (as HF)	10/11/12/04/12	0.2	100 % of values < ELV	0.002	mg/Nm3	yes	ISO/DIS 15713:2004		
6C09B3	Fluorine and inorganic compounds (as HF)	10/11/07/12	0.2	100 % of values < ELV	0.003	mg/Nm3	yes	ISO/DIS 15713:2004		
6C09B3	Fluorine and inorganic compounds (as HF)	02/12/10/12	0.2	100 % of values < ELV	0.002	mg/Nm3	yes	ISO/DIS 15713:2004		
6C09B3	TA Luft inorganic dust particles class 2	10/11/12/04/12	n/a	100 % of values < ELV	0.0016	mg/Nm3	yes	EN 14385:2004		
SC09B3	TA Luft inorganic dust particles class 2	10/11/07/12	n/a	100 % of values < ELV	0.0011	mg/Nm3	yes	EN 14385:2004		
5C09B3	TA Luft inorganic dust particles class 3	10/11/12/04/12	0.5	100 % of values < ELV	0.0041	mg/Nm3	yes	EN 14385:2004		
5C09B3	TA Luft inorganic dust particles class 3	10/11/07/12	0.5	100 % of values < ELV	0.0026	mg/Nm3	yes	EN 14385:2004		
SC09B3	Dust	10/11/12/04/12	30	100 % of values < ELV	0.03	mg/Nm3	yes	отн		

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SC09B3	Dust	10/11/07/12	30	100 % of values < ELV	0.02	mg/Nm3	yes	отн		
EF39B3	volumetric flow	16/17/01/12	9216	100 % of values < ELV	7837	Nm3/hour	yes	ОТН		
EF39B3	volumetric flow	10/11/12/04/12	9216	100 % of values < ELV	5673	Nm3/hour	yes	отн		
L1 3383	voidinetrie now	10/11/12/04/12	3210	100 /0 OI Values < EEV	3073	Minsylloui	yes	o		
EF39B3	volumetric flow	10/11/07/12	9216	100 % of values < ELV	8303	Nm3/hour	yes	отн		
EF39B3	volumetric flow	02/12/10/12	9216	100 % of values < ELV	5315	Nm3/hour	yes	отн		
	TA Luft organic									
EF39B3	substances class 1	16/17/01/12	15	100 % of values < ELV	0.27	mg/Nm3	yes	EN 13649:2001	Total TA Luft organics = 485.66	
FF20D2	TA Luft organic	10/11/12/04/12		100 % -6	2.42	/N 2		EN 42540-2004		
EF39B3	substances class 1	10/11/12/04/12	15	100 % of values < ELV	0.12	mg/Nm3	yes	EN 13649:2001		
EF39B3	TA Luft organic substances class 1	16/17/01/12	15	100 % of values < ELV	0.00	mg/Nm3	ves	EN 13649:2001		
2. 3303	TA Luft organic	10/11/01/12	13	200 / OI VOIGES VELV	0.03	s/IIIII3	yes	2.1.13043.2001		
EF39B3	substances class 1	02/12/10/12	15	100 % of values < ELV	0.09	mg/Nm3	yes	EN 13649:2001		
	TA Luft organic									
EF39B3	substances class 2	16/17/01/12	80	100 % of values < ELV	0.27	mg/Nm3	yes	EN 13649:2001		
	TA Luft organic									
EF39B3	substances class 2	10/11/12/04/12	80	100 % of values < ELV	0.12	mg/Nm3	yes	EN 13649:2001		
FF2000	TA Luft organic	40/44/07/40		400 07 6 1	0.00	41. 5				
EF39B3	substances class 2	10/11/07/12	80	100 % of values < ELV	0.09	mg/Nm3	yes	EN 13649:2001		
EF39B3	TA Luft organic substances class 2	02/12/10/12	80	100 % of values < ELV	0.09	mg/Nm3	yes	EN 13649:2001		
	TA Luft organic	,,,			-		144			
EF39B3	substances class 3	16/17/01/12	150	100 % of values < ELV	2.4	mg/Nm3	yes	EN 13649:2001		
	TA Luft organic									
EF39B3	substances class 3	10/11/12/04/12	150	100 % of values < ELV	2.7	mg/Nm3	yes	EN 13649:2001		
	TA Luft organic									
EF39B3	substances class 3	10/11/07/12	150	100 % of values < ELV	0.87	mg/Nm3	yes	EN 13649:2001		
FF20D2	TA Luft organic	02/42/40/42	450	100 % -6		/N 2		EN 42540-2004		
EF39B3	substances class 3	02/12/10/12	150	100 % of values < ELV	5.5	mg/Nm3	yes	EN 13649:2001		
EF38B3	volumetric flow	16/17/01/12	9216	100 % of values < ELV	7447	Nm3/hour	ves	отн		
		, , , ,								
EF38B3	volumetric flow	10/11/12/04/12	9216	100 % of values < ELV	9021	Nm3/hour	yes	отн		
EF38B3	volumetric flow	10/11/07/12	9216	100 % of values < ELV	8555	Nm3/hour	yes	отн		
EF38B3	volumetric flow	02/12/10/12	9216	100 % of values < ELV	5473	Nm3/hour	yes	ОТН		
EF38B3	TA Luft organic substances class 1	16/17/01/12	15	100 % of values < ELV	0.35	mg/Nm3	ves	EN 13649:2001		
LI JODS		10/1//01/12	15	100 % OI VAIUES CELV	0.25	HIG/INIIS	yes	LIV 13049.2001		
EF38B3	TA Luft organic substances class 1	10/11/12/04/12	15	100 % of values < ELV	0.12	mg/Nm3	ves	EN 13649:2001		

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	TA Luft organic							
EF38B3	substances class 1	10/11/07/12	15 100 % of values < ELV	0.09	mg/Nm3	yes	EN 13649:2001	
	TA Luft organic							
EF38B3	substances class 1	02/12/10/12	15 100 % of values < ELV	0.09	mg/Nm3	yes	EN 13649:2001	
	TA Luft organic							
EF38B3	substances class 2	16/17/01/12	80 100 % of values < ELV	0.25	mg/Nm3	yes	EN 13649:2001	
	TA Luft organic							
EF38B3	substances class 2	10/11/12/04/12	80 100 % of values < ELV	0.12	2 mg/Nm3	yes	EN 13649:2001	
EF38B3	TA Luft organic	40/44/07/40	20 400 6 4 5 14	0.00			511 405 40 0004	
EF38B3	substances class 2	10/11/07/12	80 100 % of values < ELV	0.09	mg/Nm3	yes	EN 13649:2001	
EF38B3	TA Luft organic substances class 2	02/12/10/12	80 100 % of values < ELV	0.00	9 mg/Nm3	yes	EN 13649:2001	
LI 3003		02/12/10/12	30 100 % Of Values \ LLV	0.03	ing/ivins	yes	LN 13045.2001	
EF38B3	TA Luft organic substances class 3	16/17/01/12	150 100 % of values < ELV	3 13	3 mg/Nm3	yes	EN 13649:2001	
		,,,		5.1.		,		
EF38B3	TA Luft organic substances class 3	10/11/12/04/12	150 100 % of values < ELV	1.47	7 mg/Nm3	ves	EN 13649:2001	
	TA Luft organic	, , , , , , , ,						
EF38B3	substances class 3	10/11/07/12	150 100 % of values < ELV	4.06	mg/Nm3	yes	EN 13649:2001	
	TA Luft organic							
EF38B3	substances class 3	02/12/10/12	150 100 % of values < ELV	5.63	mg/Nm3	yes	EN 13649:2001	
EF04B3	volumetric flow	16/17/01/12	9216 100 % of values < ELV	2275	Nm3/hour	yes	отн	
EF04B3	volumetric flow	10/11/12/04/12	9216 100 % of values < ELV	3918	Nm3/hour	yes	ОТН	
EF04B3	volumetric flow	10/11/07/12	9216 100 % of values < ELV	4037	7 Nm3/hour	yes	ОТН	
EF04B3	volumetric flow		9216 100 % of values < ELV		Nm3/hour	yes	OTH	
550400	TA Luft organic	45 (47 (04 (42	45 400 00 6 1 1 15114	0.00	4. 2		511 405 40 0004	
EF04B3	substances class 1	16/17/01/12	15 100 % of values < ELV	0.31	1 mg/Nm3	yes	EN 13649:2001	
EF04B3	TA Luft organic substances class 1	10/11/12/04/12	15 100 % of values < ELV	0.12	2 mg/Nm3	yes	EN 13649:2001	
2.0403		10/11/12/04/12	15 100 % Of Values V ELV	0.12	mg/mm/	yes	EN 13045.2001	
EF04B3	TA Luft organic substances class 1	10/11/07/12	15 100 % of values < ELV	0.09	9 mg/Nm3	yes	EN 13649:2001	
	TA Luft organic	,,,		0.0.				
EF04B3	substances class 1		15 100 % of values < ELV		mg/Nm3	yes	EN 13649:2001	
	TA Luft organic							
EF04B3	substances class 2	16/17/01/12	80	0.31	1 mg/Nm3	yes	EN 13649:2001	
	TA Luft organic							
EF04B3	substances class 2	10/11/12/04/12	80 100 % of values < ELV	0.12	2 mg/Nm3	yes	EN 13649:2001	
	TA Luft organic							
EF04B3	substances class 2	10/11/07/12	80 100 % of values < ELV	0.09	mg/Nm3	yes	EN 13649:2001	
	TA Luft organic							
EF04B3	substances class 2		80 100 % of values < ELV		mg/Nm3	yes	EN 13649:2001	
	TA Luft organic							
EF04B3	substances class 3	16/17/01/12	150 100 % of values < ELV	2.43	mg/Nm3	yes	EN 13649:2001	

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EF04B3	TA Luft organic substances class 3	10/11/12/04/12	150	100 % of values < ELV	1.96	mg/Nm3	yes	EN 13649:2001		
EF04B3	TA Luft organic substances class 3	10/11/07/12	150	100 % of values < ELV	0.97	mg/Nm3	yes	EN 13649:2001		
EF04B3	TA Luft organic substances class 3		150	100 % of values < ELV		mg/Nm3	yes	EN 13649:2001		
EF03B3	volumetric flow	02/12/10/12	9216	100 % of values < ELV	775	Nm3/hour	yes	отн		
EF03B3	TA Luft organic substances class 1	02/12/10/12	15	100 % of values < ELV	0.09	mg/Nm3	yes	EN 13649:2001		
EF03B3	TA Luft organic substances class 2	02/12/10/12		100 % of values < ELV		mg/Nm3	yes	EN 13649:2001		
EF03B3	TA Luft organic substances class 3	02/12/10/12	150	100 % of values < ELV	6.99	mg/Nm3	yes	EN 13649:2001		

AIR-summary template	Lic No:	P0224-02	Year	2012
Continuous Monitoring				
4 Does your site carry out continuous air emissions monitoring?	No			
If yes please review your continuous monitoring data and report the required fields below in Table 3 and compare it to its relevant Emission Limit Value (ELV)				
5 Did continuous monitoring equipment experience downtime? If yes please record downtime in table 3 below	SELECT			
Do you have a proactive service agreement for each piece of continuous monitoring equipment?  Did your site experience any abatement system bypasses? If yes please detail them in table 4 below	SELECT SELECT			
Table A2: Summary of average emissions -continuous monitoring				

#### Table Az. Sammary of average commissions continuous monitoring

Emission reference no:		any revision Period			Units of measurement	Annual Emission	Annual maximum	Monitoring Equipment downtime (hours)	Number of ELV exceedences in current reporting year	Comments
		thereof								
	SELECT			SELECT	SELECT					
	SELECT				SELECT					
	SELECT				SELECT					
	SELECT				SELECT					
	SELECT				SELECT					

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

### Table A3: Abatement system bypass reporting table Bypass protocol

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

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

<sup>\*\*</sup> an accurate record of time bypass beginning and end should be logged on site and maintained for future

Agency inspections please refer to bypass protocol link

ļ	AIR-summary t	template				Lic No:	P0224-02		Year	2012
	Solvent u	use and managemen	t on site							
8 0	o you have a total	l Emission Limit Value of d			if yes please fill out tables A4 an		_	No		
		ent Management Pla ssion limit value		Solvent regulations	Please refer to linked solven complete table 5					
	Reporting year	Total solvent input on site (kg)	emissions to Air	Total VOC emissions as %of solvent	Total Emission Limit Value (ELV) in licence or any revision thereof	Compliance				
						SELECT SELECT				
İ	Table A5: S	olvent Mass Balance	summary		L	SEEECI				
		(I) Inputs (kg)					(O) Outputs (kg)			
	Solvent	(I) Inputs (kg)		Solvents lost in water (kg)		Fugitive Organic Solvent (kg)	Solvent released in other ways e.g. by-		Total emission of Solvent to air (kg)	
L										
								Total		

# AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)

Lic No: P0224-02

2012

Does your site have licensed emissions direct to surface water or direct to sewer? If yes please complete table W2 and W3 below for the current reporting year and answer further questions. If you do not have licenced emissions you only need to complete table W1 and or W2 for surface water analysis and visual inspections

Was it a requirement of your licence to carry out visual inspections on any surface water 2 discharges or watercourses on or near your site? If yes please complete table W2 below summarising only any evidence of contamination noted during visual inspections

Yes	Emissions to sewer and surface water. Surface water monthly results were taken. Various trigger levels have been set for surface water, outside of the IPPC licence. Sewer results are given in monthly averages.
Yes	Inspection reports on file. No evidence of visual contamination on surface water discharge points.

Table W1 Surface water monitoring

	e WI Surface Water	momtoring								
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
SW06	onsite	Not applicable	pH	Jan	6.8-8.9	deviate from th	7.9	pH units	yes	
SW06	onsite	Not applicable	pH	Feb	6.8-8.9	deviate from th	no sample	pH units	yes	
SW06	onsite	Not applicable	pH	Mar	6.8-8.9	deviate from th	7.5	pH units	yes	í
SW06	onsite	Not applicable	pH	Apr	6.8-8.9	deviate from th	8.1	pH units	yes	
SW06	onsite	Not applicable	pH	May	6.8-8.9	deviate from th	7.5	pH units		
SW06	onsite	Not applicable	pH	Jun	6.8-8.9	deviate from th	8.1	pH units	yes	
SW06	onsite	Not applicable	pH	Jul	6.8-8.9	deviate from th	7.3	pH units	yes	
SW06	onsite	Not applicable	pH	Aug	6.8-8.9	deviate from th	7.7	pH units	yes	
SW06	onsite	Not applicable	· ·		6.8-8.9	deviate from th	8.4	pH units	· ·	
SW06	onsite		pH	Sep Oct	6.8-8.9	deviate from th	0	pH units	yes	
SW06		Not applicable	pH		6.8-8.9		7.9		yes	
	onsite	Not applicable	pH	Nov	6.8-8.9	deviate from th		pH units	yes	
SW06 SW06	onsite	Not applicable	pH	Dec	75	deviate from th	7.6 3.37	pH units	yes	
SW06	onsite	Not applicable	al Organic Carbon (a	Jan	75	N/A		mg/L	yes	
	onsite	Not applicable	al Organic Carbon (a	Feb		N/A	No sample	mg/L	yes	
SW06	onsite	Not applicable	al Organic Carbon (a	Mar	75	N/A	31	mg/L	yes	
SW06	onsite	Not applicable	al Organic Carbon (a	Apr	75	N/A	6.54	mg/L	yes	1
SW06	onsite	Not applicable	al Organic Carbon (a	May	75	N/A	14.8	mg/L	yes	<b> </b>
SW06	onsite	Not applicable	al Organic Carbon (a	Jun	75	N/A	6.05	mg/L	yes	1
SW06	onsite	Not applicable	al Organic Carbon (a	Jul	75	N/A	2.8	mg/L	yes	<b> </b>
SW06	onsite	Not applicable	al Organic Carbon (a	Aug	75	N/A	1.28	mg/L	yes	<b></b>
SW06	onsite	Not applicable	al Organic Carbon (a	Sep	75	N/A	1.4	mg/L	yes	<b> </b>
SW06	onsite	Not applicable	al Organic Carbon (a	Oct	75	N/A	0	mg/L	yes	<b></b>
SW06	onsite	Not applicable	al Organic Carbon (a	Nov	75	N/A	6.14	mg/L	yes	
SW06	onsite	Not applicable	al Organic Carbon (a	Dec	75	N/A	2.44	μS/cm @20oC	yes	<b></b>
SW06	onsite	Not applicable	Conductivity	Jan	570	N/A	98.3	μS/cm @20oC	yes	
SW06	onsite	Not applicable	Conductivity	Feb	570	N/A	No sample	μS/cm @20oC	yes	
SW06	onsite	Not applicable	Conductivity	Mar	570	N/A	196	μS/cm @20oC	yes	<b></b>
SW06	onsite	Not applicable	Conductivity	Apr	570	N/A	537	μS/cm @20oC	yes	<b></b>
SW06	onsite	Not applicable	Conductivity	May	570	N/A	208	μS/cm @20oC	yes	<b></b>
SW06	onsite	Not applicable	Conductivity	Jun	570	N/A	120.9	μS/cm @20oC	yes	<b></b>
SW06	onsite	Not applicable	Conductivity	Jul	570	N/A	92.5	μS/cm @20oC	yes	<b></b>
SW06	onsite	Not applicable	Conductivity	Aug	570	N/A	37	μS/cm @20oC	yes	<b></b>
SW06	onsite	Not applicable	Conductivity	Sep	570	N/A	30	μS/cm @20oC	yes	<b></b>
SW06	onsite	Not applicable	Conductivity	Oct	570	N/A	0	μS/cm @20oC	yes	
SW06	onsite	Not applicable	Conductivity	Nov	570	N/A	86.3	μS/cm @20oC	yes	
SW06	onsite	Not applicable	Conductivity	Dec	570	N/A	131	μS/cm @20oC	yes	<b></b>
SW07	onsite	Not applicable	pH	Jan	6.0-9.4	N/A	7.8	pH units	yes	<b></b>
SW07	onsite	Not applicable	pH	Feb	6.0-9.4	N/A	no sample	pH units	yes	<b></b>
SW07	onsite	Not applicable	pH	Mar	6.0-9.4	N/A	7.8	pH units	yes	<b></b>
SW07	onsite	Not applicable	pH	Apr	6.0-9.4	N/A	8.2	pH units	yes	<b></b>
SW07	onsite	Not applicable	pH	May	6.0-9.4	N/A	7.6	pH units	yes	<b></b>
SW07	onsite	Not applicable	pH	Jun	6.0-9.4	N/A	7.8	pH units	yes	<b></b>
SW07	onsite	Not applicable	pH	Jul	6.0-9.4	N/A	7.2	pH units	yes	<b></b>
SW07	onsite	Not applicable	pH	Aug	6.0-9.4	N/A	8	pH units	yes	<b></b>
SW07	onsite	Not applicable	pH	Sep	6.0-9.4	N/A	8.2	pH units	yes	ļ
SW07	onsite	Not applicable	pH	Oct	6.0-9.4	N/A	0	pH units	yes	<b></b>
SW07	onsite	Not applicable	pH	Nov	6.0-9.4	N/A	7.6	pH units	yes	ļ
SW07	onsite	Not applicable	pH	Dec	6.0-9.4	N/A	7.3	pH units	yes	ļ
SW07	onsite	Not applicable	al Organic Carbon (a	Jan	41	N/A	1.93	mg/L	yes	ļ
SW07	onsite	Not applicable	al Organic Carbon (a	Feb	41	N/A	No sample	mg/L	yes	ļ
SW07	onsite	Not applicable	al Organic Carbon (a	Mar	41	N/A	2.32	mg/L	yes	ļ
SW07	onsite	Not applicable	al Organic Carbon (a	Apr	41	N/A	3.06	mg/L	yes	ļ
SW07	onsite	Not applicable	al Organic Carbon (a	May	41	N/A	7.33	mg/L	yes	i

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SW07	onsite	Not applicable	al Organic Carbon (a	Jun	41	N/A	4.59	mg/L	yes	
SW07	onsite	Not applicable	al Organic Carbon (a	Jul	41	N/A	3.83	mg/L	yes	
SW07	onsite	Not applicable	al Organic Carbon (a	Aug	41	N/A	1.29	mg/L	yes	
SW07	onsite	Not applicable	al Organic Carbon (a	Sep	41	N/A	1.19	mg/L	yes	
SW07	onsite	Not applicable	al Organic Carbon (a	Oct	41	N/A	0	mg/L	yes	
SW07	onsite	Not applicable	al Organic Carbon (a	Nov	41	N/A	2.36	mg/L	yes	
SW07	onsite	Not applicable	al Organic Carbon (a	Dec	41	N/A	1.71	μS/cm @20oC	yes	
SW07	onsite	Not applicable	Conductivity	Jan	799	N/A	43.4	μS/cm @20oC	yes	
SW07	onsite	Not applicable	Conductivity	Feb	799	N/A	No sample	μS/cm @20oC	yes	
SW07	onsite	Not applicable	Conductivity	Mar	799	N/A	75	μS/cm @20oC	yes	
SW07	onsite	Not applicable	Conductivity	Apr	799	N/A	69	μS/cm @20oC	yes	
SW07	onsite	Not applicable	Conductivity	May	799	N/A	96.8	uS/cm @20oC	yes	
SW07	onsite	Not applicable	Conductivity	Jun	799	N/A	48.5	μS/cm @20oC	yes	
SW07	onsite	Not applicable	Conductivity	Jul	799	N/A	114.4	μS/cm @20oC	yes	
SW07	onsite	Not applicable	Conductivity	Aug	799	N/A	49	μS/cm @20oC	yes	
SW07	onsite	Not applicable	Conductivity	Sep	799	N/A	10.4	μS/cm @20oC	yes	
SW07	onsite	Not applicable	Conductivity	Oct	799	N/A	0	μS/cm @20oC	yes	
SW07	onsite	Not applicable	Conductivity	Nov	799	N/A	60.3	μS/cm @20oC	ves	
SW07	onsite	Not applicable	Conductivity	Dec	799	N/A	119	μS/cm @20oC	yes	
SW08	onsite	Not applicable	pH	Jan	5.9-9.2	N/A	7.7	pH units	ves	
SW08	onsite	Not applicable	pH	Feb	5.9-9.2	N/A	no sample	pH units	ves	
SW08	onsite	Not applicable	pH	Mar	5.9-9.2	N/A	7.7	pH units	ves	
SW08	onsite	Not applicable	pH	Apr	5.9-9.2	N/A	8	pH units	ves	
SW08	onsite	Not applicable	pH	May	5.9-9.2	N/A	no sample	pH units	yes	
SW08	onsite	Not applicable	pH	Jun	5.9-9.2	N/A	7.8	pH units	yes	
SW08	onsite	Not applicable	pH	Jul	5.9-9.2	N/A	7.2	pH units	ves	
SW08	onsite	Not applicable	pH	Aug	5.9-9.2	N/A	7.8	pH units	ves	
SW08	onsite	Not applicable	pH	Sep	5.9-9.2	N/A	8.4	pH units	ves	
SW08	onsite	Not applicable	pH	Oct	5.9-9.2	N/A	0	pH units	yes	
SW08	onsite	Not applicable	pH	Nov	5.9-9.2	N/A	7.7	pH units	yes	
SW08	onsite	Not applicable	pH	Dec	5.9-9.2	N/A	7.5	pH units	yes	
SW08	onsite	Not applicable	al Organic Carbon (a	Jan	20	N/A	2.61	mg/L	yes	
SW08	onsite	Not applicable	al Organic Carbon (a	Feb	20	N/A	No sample	mg/L	yes	
SW08	onsite	Not applicable	al Organic Carbon (a	Mar	20	N/A	3.48	mg/L	· ·	
SW08	onsite	''	al Organic Carbon (a	Apr	20	N/A	2.99	mg/L	yes	
SW08	onsite	Not applicable  Not applicable	al Organic Carbon (a	Mav	20	N/A N/A	No sample	mg/L	yes ves	
SW08	onsite	Not applicable	al Organic Carbon (a	Jun	20	N/A	2.97	mg/L	yes	
SW08	onsite	Not applicable  Not applicable	al Organic Carbon (a	Jul	20	N/A N/A	2.1	mg/L	yes	
SW08	onsite	Not applicable	al Organic Carbon (a		20	N/A N/A	1.07		yes	
SW08	onsite	''		Aug	20	,	1.82	mg/L	· ·	
SW08	onsite	Not applicable Not applicable	al Organic Carbon (a al Organic Carbon (a	Sep Oct	20	N/A N/A	0	mg/L mg/L	yes	
SW08	onsite	Not applicable	al Organic Carbon (a	Nov	20	N/A	2.08	mg/L	yes	
SW08	onsite	Not applicable  Not applicable		Dec	20	N/A N/A	1.84	-	yes	
SW08	onsite	Not applicable  Not applicable	al Organic Carbon (a Conductivity		677	N/A N/A	27.3	μS/cm @20oC μS/cm @20oC	yes	
SW08	onsite	''		Jan Feb	677	N/A N/A	No sample		yes	
SW08		Not applicable	Conductivity		677		39	μS/cm @20oC	yes	
SW08	onsite	Not applicable	Conductivity	Mar	677	N/A	49	μS/cm @20oC	yes	
SW08	onsite	Not applicable	Conductivity	Apr	677	N/A	No sample	μS/cm @20oC	yes	1
SW08 SW08	onsite	Not applicable	Conductivity	May	677	N/A	No sample 22.5	μS/cm @20oC	yes	
SW08	onsite	Not applicable	Conductivity	Jun	677	N/A	18.9	μS/cm @20oC	yes	1
SW08 SW08	onsite	Not applicable	Conductivity	Jul	677	N/A	18.9	μS/cm @20oC	yes	
	onsite	Not applicable	Conductivity	Aug		N/A	32.2	μS/cm @20oC	yes	
SW08 SW08	onsite	Not applicable	Conductivity	Sep	677 677	N/A	32.2	μS/cm @20oC	yes	
	onsite	Not applicable	Conductivity	Oct		N/A		μS/cm @20oC	yes	
SW08 SW08	onsite	Not applicable	Conductivity	Nov	677 677	N/A	41.6 153	μS/cm @20oC	yes	1
SWUS	SELECT	Not applicable	Conductivity	Dec	6//	N/A	153	μS/cm @20oC	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	Date of inspection	Description of contamination	Source of contamination	Corrective action	Comments
		,	SELECT		
			SELECT		

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

Was there any result in breach of licence requirements? If yes please provide brief details in the comment section of Table W3 below



See comments below



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

											1				
Emission reference no:	Emission released to	Parameter/ SubstanceNote 1	Type of sample	Frequency of monitoring	Averaging period	ELV or trigger values in licence or any revision therof <sup>Note 2</sup>	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Method of analysis	Procedural reference source	Procedural reference standard number	Annual mass load (kg)	Comments
PW01	Wastewater/Sewer	Sulphate	composite	Daily	Monthly	1000	All values < ELV	326.8	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025	69218	
PW01	Wastewater/Sewer	Sulphate	composite	Daily	Monthly	1000	All values < ELV	314.35	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Sulphate	composite	Daily	Monthly	1000	All values < ELV	319.86	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Sulphate	composite	Daily	Monthly	1000	All values < ELV	365.4	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Sulphate	composite	Daily	Monthly	1000	All values < ELV	359.6	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Sulphate	composite	Daily	Monthly	1000	All values < ELV	334.6	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Sulphate	composite	Daily	Monthly	1000	All values < ELV	353.66	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Sulphate	composite	Daily	Monthly	1000	All values < ELV	361.3	mg/L	no (if no please enter details in comments box)	Spectrophotometry (Colorimetry)	ISO	17025		Sulphate exceedance on sample for 6th August - root cause and corrective actions notified to the Agency on 4th September
PW01	Wastewater/Sewer	Sulphate	composite	Daily	Monthly	1000	All values < ELV	463.6	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Sulphate	composite	Daily	Monthly	1000	All values < ELV	430.1	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Sulphate	composite	Daily	Monthly	1000	All values < ELV	368.46	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Sulphate	composite	Daily	Monthly	1000	All values < ELV	345.1	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	COD	composite	Biweekly	Monthly	200	All values < ELV	20.44	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025	3103	
PW01	Wastewater/Sewer	COD	composite	Biweekly	Monthly	200	All values < ELV	15	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	COD	composite	Biweekly	Monthly	200	All values < ELV	11.78	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	COD	composite	Biweekly	Monthly	200	All values < ELV	22.19	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	COD	composite	Biweekly	Monthly	200	All values < ELV	16.3	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	COD	composite	Biweekly	Monthly	200	All values < ELV	26.2	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	COD	composite	Biweekly	Monthly	200	All values < ELV	10.125	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	COD	composite	Biweekly	Monthly	200	All values < ELV	12.9	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	COD	composite	Biweekly	Monthly	200	All values < ELV	15.6	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	COD	composite	Biweekly	Monthly	200	All values < ELV	13.25	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	COD	composite	Biweekly	Monthly	200	All values < ELV	10.75	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	COD	composite	Biweekly	Monthly	200	All values < ELV	17.78	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Fluorides (as total F)	composite	Weekly	Monthly	50	All values < ELV	10.84	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025	2429	
PW01	Wastewater/Sewer	Fluorides (as total F)	composite	Weekly	Monthly	50	All values < ELV	19.654	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Fluorides (as total F)	composite	Weekly	Monthly	50	All values < ELV	13.32	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Fluorides (as total F)	composite	Weekly	Monthly	50	All values < ELV	16.16	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Fluorides (as total F)	composite	Weekly	Monthly	50	All values < ELV	12.3	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Fluorides (as total F)	composite	Weekly	Monthly	50	All values < ELV	12.1	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Fluorides (as total F)	composite	Weekly	Monthly	50	All values < ELV	7.925	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Fluorides (as total F)	composite	Weekly	Monthly	50	All values < ELV	9.4	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Fluorides (as total F)	composite	Weekly	Monthly	50	All values < ELV	11.8	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Fluorides (as total F)	composite	Weekly	Monthly	50	All values < ELV	13.9	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Fluorides (as total F)	composite	Weekly	Monthly	50	All values < ELV	14.23	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Fluorides (as total F)	composite	Weekly	Monthly	50	All values < ELV	11.64	mg/L	yes	Spectrophotometry (Colorimetry) ISO		17025		
PW01	Wastewater/Sewer	Total heavy metals	composite	Weekly	Monthly	3	All values < ELV	0.00696	mg/L	yes	ICP / ICPMS	ISO	17025	3.9	
PW01	Wastewater/Sewer	Total heavy metals	composite	Weekly	Monthly	3	All values < ELV	0.0216	mg/L	yes			17025		
PW01	Wastewater/Sewer	Total heavy metals	composite	Weekly	Monthly	3	All values < ELV	0.01594	mg/L	yes	ICP / ICPMS	ISO	17025		
PW01	Wastewater/Sewer	Total heavy metals	composite	Weekly	Monthly	3	All values < ELV	0.019	mg/L	yes	ICP / ICPMS	ISO	17025	1	

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PW01	Wastewater/Sewer	Total heavy metals		Weekly	Monthly	3	All values < ELV	0.0249			ICP / ICPMS	ISO			_
PW01	Wastewater/Sewer	,	composite	Weekly	Monthly			0.0249	mg/L	yes	ICP / ICPMS	ISO	17025		
		Total heavy metals	composite	,	,	3	All values < ELV		mg/L	yes	·		17025		
PW01	Wastewater/Sewer	Total heavy metals	composite	Weekly	Monthly	3	All values < ELV	0.00448	mg/L	yes	ICP / ICPMS	ISO	17025		
PW01	Wastewater/Sewer	Total heavy metals	composite	Weekly	Monthly	3	All values < ELV	0.006	mg/L	yes	ICP / ICPMS	ISO	17025		
PW01	Wastewater/Sewer	Total heavy metals	composite	Weekly	Monthly	3	All values < ELV	0.00492	mg/L	yes	ICP / ICPMS	ISO	17025		
PW01	Wastewater/Sewer	Total heavy metals	composite	Weekly	Monthly	3	All values < ELV	0.00771	mg/L	yes	ICP / ICPMS	ISO	17025		
PW01	Wastewater/Sewer	Total heavy metals	composite	Weekly	Monthly	3	All values < ELV	0.004951	mg/L	yes	ICP / ICPMS	ISO	17025		
PW01	Wastewater/Sewer	Total heavy metals	composite	Weekly	Monthly	3	All values < ELV	0.004038	mg/L	yes	ICP / ICPMS	ISO	17025		
PW01	Wastewater/Sewer	Suspended Solids	composite	Monthly	Monthly	200	All values < ELV	30	mg/L	yes	Gravimetric analysis	Other (please specify)	EPA method 160.2 for Gravimetric analysis and Standard method for the examination of water and wastewater 2005, 21st Edition, Method 2540D	4512	
PW01	Wastewater/Sewer	Suspended Solids	composite	Monthly	Monthly	200	All values < ELV	32	mg/L	yes	Gravimetric analysis	Other (please specify)	As above		
PW01 PW01	Wastewater/Sewer	Suspended Solids	composite	Monthly Monthly	Monthly Monthly	200	All values < ELV	28	mg/L	yes	Gravimetric analysis	Other (please specify)	As above		-
PW01 PW01	Wastewater/Sewer Wastewater/Sewer	Suspended Solids Suspended Solids	composite composite	Monthly	Monthly	200 200	All values < ELV All values < ELV	22 24	mg/L mg/L	yes yes	Gravimetric analysis Gravimetric analysis	Other (please specify) Other (please specify)	As above As above		
PW01	Wastewater/Sewer	Suspended Solids	composite	Monthly	Monthly	200	All values < ELV	21	mg/L	yes	Gravimetric analysis Gravimetric analysis	Other (please specify)	As above		
PW01	Wastewater/Sewer	Suspended Solids	composite	Monthly	Monthly	200	All values < ELV	13	mg/L	yes	Gravimetric analysis	Other (please specify)	As above		
PW01	Wastewater/Sewer	Suspended Solids	composite	Monthly	Monthly	200	All values < ELV	14	mg/L	yes	Gravimetric analysis	Other (please specify)	As above		
PW01	Wastewater/Sewer	Suspended Solids	composite	Monthly	Monthly	200	All values < ELV	20	mg/L	yes	Gravimetric analysis	Other (please specify)	As above		
PW01	Wastewater/Sewer	Suspended Solids	composite	Monthly	Monthly	200	All values < ELV	38	mg/L	yes	Gravimetric analysis	Other (please specify)	As above		
PW01	Wastewater/Sewer	Suspended Solids	composite	Monthly	Monthly	200	All values < ELV	24	mg/L	yes	Gravimetric analysis	Other (please specify)	As above		
PW01	Wastewater/Sewer	Suspended Solids	composite	Monthly	Monthly	200	All values < ELV	17 0.463	mg/L	yes	Gravimetric analysis	Other (please specify)	As above	2496	
	Wastewater/Sewer	Ammonia (as N)	composite	Monthly	Monthly	20	All values < ELV		mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025	2496	
PW01	Wastewater/Sewer	Ammonia (as N)	composite	Monthly	Monthly	20	All values < ELV	11.05	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Ammonia (as N)	composite	Monthly	Monthly	20	All values < ELV	8.85	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Ammonia (as N)	composite	Monthly	Monthly	20	All values < ELV	9.27	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Ammonia (as N)	composite	Monthly	Monthly	20	All values < ELV	26.67	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Ammonia (as N)	composite	Monthly	Monthly	20	All values < ELV	27.6	mg/L	no (if no please enter details in comments box)	Spectrophotometry (Colorimetry)	ISO	17025	Ammon exceedanc sample for 3i All details o cause and co actions repo the Agency May/Jur	ce on lrd May. on root orrective orted to during
PW01	Wastewater/Sewer	Ammonia (as N)	composite	Monthly	Monthly	20	All values < ELV	11.01	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Ammonia (as N)	composite	Monthly	Monthly	20	All values < ELV	10.9	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		-
PW01	Wastewater/Sewer	Ammonia (as N)	composite	Monthly	Monthly	20	All values < ELV	10.04			Spectrophotometry (Colorimetry)	ISO			
PW01	Wastewater/Sewer			Monthly	Monthly			12.12	mg/L	yes			17025		
PW01		Ammonia (as N)	composite		Monthly	20	All values < ELV	12.12	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
	Wastewater/Sewer	Ammonia (as N)	composite	Monthly		20	All values < ELV		mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Ammonia (as N)	composite	Monthly	Monthly	20	All values < ELV	14.38	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025		
PW01	Wastewater/Sewer	Total phosphorus	composite	Monthly	Monthly	20	All values < ELV	0.906	mg/L	yes	Digestion + Spectrophotometry	ISO	17025	135	
PW01	Wastewater/Sewer	Total phosphorus	composite	Monthly	Monthly	20	All values < ELV	0.522	mg/L	yes	Digestion + Spectrophotometry	ISO	17025		
PW01	Wastewater/Sewer	Total phosphorus	composite	Monthly	Monthly	20	All values < ELV	0.338	mg/L	yes	Digestion + Spectrophotometry	ISO	17025		
PW01	Wastewater/Sewer	Total phosphorus	composite	Monthly	Monthly	20	All values < ELV	0.908	mg/L	yes	Digestion + Spectrophotometry	ISO	17025		
PW01	Wastewater/Sewer	Total phosphorus	composite	Monthly	Monthly	20	All values < ELV	0.763	mg/L	yes	Digestion + Spectrophotometry	ISO	17025		
PW01	Wastewater/Sewer	Total phosphorus	composite	Monthly	Monthly	20	All values < ELV	1.106	mg/L	yes	Digestion + Spectrophotometry	ISO	17025		
PW01	Wastewater/Sewer	Total phosphorus	composite	Monthly	Monthly	20	All values < ELV	0.748	mg/L	yes	Digestion + Spectrophotometry	ISO	17025		
PW01	Wastewater/Sewer	Total phosphorus	composite	Monthly	Monthly	20	All values < ELV	0.478	mg/L	yes	Digestion + Spectrophotometry	ISO	17025		
PW01	Wastewater/Sewer	Total phosphorus	composite	Monthly	Monthly	20	All values < ELV	0.513	mg/L	yes	Digestion + Spectrophotometry	ISO	17025		
PW01	Wastewater/Sewer	Total phosphorus	composite	Monthly	Monthly	20	All values < ELV	0.405	mg/L	ves	Digestion + Spectrophotometry	ISO	17025		
PW01	Wastewater/Sewer	Total phosphorus	composite	Monthly	Monthly	20	All values < ELV	1.34	mg/L	ves	Digestion + Spectrophotometry	ISO	17025		-
PW01	Wastewater/Sewer	Total phosphorus	composite	Monthly	Monthly	20	All values < ELV	0.4	mg/L	ves	Digestion + Spectrophotometry	ISO	17025		
PW01	Wastewater/Sewer	Sodium	composite	Monthly	Monthly	2000	All values < ELV	840.1	-	,	MS (Inductively Coupled Plasma - Mass Spect			123319	
PWUI	wastewater/sewer	Soulum	composite	iviontniy	iviorithiy	2000	All values < ELV	04U. I	mg/L	yes	ivio (muuctively coupled Plasma - Mass Spect	150	17025	123519	

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PW01	Wastewater/Sewer	Sodium	composite	Monthly	Monthly	2000	All values < ELV	447.7	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti		17025	
PW01	Wastewater/Sewer	Sodium	composite	Monthly	Monthly	2000	All values < ELV	641.2	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti	ISO	17025	
PW01	Wastewater/Sewer	Sodium	composite	Monthly	Monthly	2000	All values < ELV	1094	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti	ISO	17025	
PW01	Wastewater/Sewer	Sodium	composite	Monthly	Monthly	2000	All values < ELV	529.1	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti		17025	
PW01	Wastewater/Sewer	Sodium	composite	Monthly	Monthly	2000	All values < ELV	749.1	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti	ISO	17025	
PW01	Wastewater/Sewer	Sodium	composite	Monthly	Monthly	2000	All values < ELV	555.3	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti	ISO	17025	
PW01	Wastewater/Sewer	Sodium	composite	Monthly	Monthly	2000	All values < ELV	104.8	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti		17025	
PW01	Wastewater/Sewer	Sodium	composite	Monthly	Monthly	2000	All values < ELV	524.5	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti	ISO	17025	
PW01	Wastewater/Sewer	Sodium	composite	Monthly	Monthly	2000	All values < ELV	831.8	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti	ISO	17025	
PW01	Wastewater/Sewer	Sodium	composite	Monthly	Monthly	2000	All values < ELV	750.4	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti		17025	
PW01	Wastewater/Sewer	Sodium	composite	Monthly	Monthly	2000	All values < ELV	698.7	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti	ISO	17025	
PW01	Wastewater/Sewer	Tin	composite	Monthly	Monthly	2	All values < ELV	0.0028	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti	ISO	17025	0.55
PW01	Wastewater/Sewer	Tin	composite	Monthly	Monthly	2	All values < ELV	0.0028	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti	ISO	17025	
PW01	Wastewater/Sewer	Tin	composite	Monthly	Monthly	2	All values < ELV	0.0028	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti	ISO	17025	
PW01	Wastewater/Sewer	Tin	composite	Monthly	Monthly	2	All values < ELV	0.0028	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti	ISO	17025	
PW01	Wastewater/Sewer	Tin	composite	Monthly	Monthly	2	All values < ELV	0.0028	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti	ISO	17025	
PW01	Wastewater/Sewer	Tin	composite	Monthly	Monthly	2	All values < ELV	0.0028	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti	ISO	17025	
PW01	Wastewater/Sewer	Tin	composite	Monthly	Monthly	2	All values < ELV	0.0028	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti	ISO	17025	
PW01	Wastewater/Sewer	Tin	composite	Monthly	Monthly	2	All values < ELV	0.0028	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specto	ISO	17025	
PW01	Wastewater/Sewer	Tin	composite	Monthly	Monthly	2	All values < ELV	0.0028	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti	ISO	17025	
PW01	Wastewater/Sewer	Tin	composite	Monthly	Monthly	2	All values < ELV	0.003403	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti	ISO	17025	
PW01	Wastewater/Sewer	Tin	composite	Monthly	Monthly	2	All values < ELV	0.0028	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti	ISO	17025	
PW01	Wastewater/Sewer	Tin	composite	Monthly	Monthly	2	All values < ELV	0.0028	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti	ISO	17025	
PW01	Wastewater/Sewer	Chlorides (as CI)	composite	Monthly	Monthly	2000	All values < ELV	1279.3	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025	159943
PW01	Wastewater/Sewer	Chlorides (as CI)	composite	Monthly	Monthly	2000	All values < ELV	1039.28	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025	
PW01	Wastewater/Sewer	Chlorides (as CI)	composite	Monthly	Monthly	2000	All values < ELV	910.31	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025	
PW01	Wastewater/Sewer	Chlorides (as CI)	composite	Monthly	Monthly	2000	All values < ELV	77.99	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025	
PW01	Wastewater/Sewer	Chlorides (as CI)	composite	Monthly	Monthly	2000	All values < ELV	651.98	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025	
PW01	Wastewater/Sewer	Chlorides (as CI)	composite	Monthly	Monthly	2000	All values < ELV	977.51	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025	
PW01	Wastewater/Sewer	Chlorides (as CI)	composite	Monthly	Monthly	2000	All values < ELV	970.7	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025	
PW01	Wastewater/Sewer	Chlorides (as CI)	composite	Monthly	Monthly	2000	All values < ELV	173.11	mg/L	ves	Spectrophotometry (Colorimetry)	ISO	17025	
PW01	Wastewater/Sewer	Chlorides (as CI)	composite	Monthly	Monthly	2000	All values < ELV	890.14	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025	
PW01	Wastewater/Sewer	Chlorides (as Cl)	composite	Monthly	Monthly	2000	All values < ELV	1198.15	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025	
PW01	Wastewater/Sewer	Chlorides (as Cl)	composite	Monthly	Monthly	2000	All values < ELV	1198.98	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025	
PW01	Wastewater/Sewer	Chlorides (as Cl)	composite	Monthly	Monthly	2000	All values < ELV	717.59	mg/L	yes	Spectrophotometry (Colorimetry)	ISO	17025	
	· · · · · · · · · · · · · · · · · · ·	Arsenic and compounds		,						,			17023	
PW01	Wastewater/Sewer	(as As)	composite	Biannually	Biannually	0.05	All values < ELV	0.00018	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti	ISO	17025	0.0022
PW01	Wastewater/Sewer	Arsenic and compounds	composite	Biannually	Biannually	0.05	All values < ELV	0.000685	mg/L	ves	MS (Inductively Coupled Plasma - Mass Specti	ISO		
-		(as As)		,						,	, , , , , , , , , , , , , , , , , , , ,		17025	
PW01	Wastewater/Sewer	Lead and compounds (as Pb)	composite	Biannually	Biannually	0.5	All values < ELV	0.01027	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti	ISO	17025	0.0004
PW01	M//C	Lead and compounds (as		Diagonally	Diagonally	0.5	All column a FIM	0.00040	/1		MAC (Indication): Counted Disease Many Counted	ISO	17023	
PW01	Wastewater/Sewer	Pb)	composite	Biannually	Biannually	0.5	All values < ELV	0.00012	mg/L	yes	MS (Inductively Coupled Plasma - Mass Specti	ISO	17025	
PW01	Wastewater/Sewer	Fats, Oils and Greases	composite	Biannually	Biannually	15	All values < ELV	<1	mg/L	yes	Other (please describe)	Other (please specify)	Standard method for the examination of water and wastewater 2005, 21st Edition, Method 2540D	0.411
PW01	Wastewater/Sewer	Fats, Oils and Greases	composite	Biannually	Biannually	15	All values < ELV	<5	mg/L	yes	Other (please describe)	Other (please specify)	Standard method for the examination of water and wastewater 2005, 21st Edition, Method 2540D	

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

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

ALK WOMENING TECHNIS SUMMARY COMPLETE WASTEWATER(SEWER)		LIC INO.	10224-02	rear
Continuous monitoring 5 Does your site carry out continuous emissions to water/sewer monitoring?	Yes		Additional Information pH , Temperature and Flow	]
If yes please summarise your continuous monitoring data below in Table W4 and compare it to its relevant Emission Limit Value (ELV)				
Did continuous monitoring equipment experience downtime? If yes please record downtime in table 4 W4 below	No			
7 Do you have a proactive service contract for each piece of continuous monitoring equipment on site?		In house maintenance		
B Did abatement system bypass occur during the reporting year? If yes please complete table W5 below	No			

### Table W4: Summary of average emissions -continuous monitoring

Emission			ELV or trigger values in licence or any revision		Compliance	Units of	Annual Emission for current reporting year		Monitoring Equipment	Number of ELV exceedences in	
reference no:	Emission released to	Parameter/ Substance	thereof	Period	Criteria	measurement	(kg)		downtime (hours)	reporting year	Comments
PW01	Wastewater/Sewer	pH	6.5-8.5	Monthly	All values < ELV	pH units	7.54	-9.40%	0	0	
PW01	Wastewater/Sewer	volumetric flow	2000	Monthly	All values < ELV	m3/day	524.94	-1.60%	0	0	
PW01	Wastewater/Sewer	Temperature	30°c	Monthly	All values < ELV	degrees C	22.46	2.30%	0	0	

2012

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

### Table W5: Abatement system bypass reporting table

Date	Duration (hours)		 action*		When was this report submitted?
				the EPA?	
				SELECT	

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

Bund/Pipeline tes	ting template				Lic No:	P0224-02		Year	2012	!				
Bund testing	7	dropdown menu click	r to see ontions				Additional information							
Are you required by you		tegrity testing on bunds and containme	ent structures ? if yes please f				Additional information							
containment structures table below	s on site, in addition to a	II bunds which failed the integrity test	-all bunding structures whic	h failed including mobile bu	nds must be listed in the	Yes								
	testing frequency period					3 years								
		rground pipelines (including stormwate	er and foul), Tanks, sumps an	d containers? (containers ref	ers to "Chemstore" type									
units and mobile bunds						Yes								
How many bunds are or		a the considered to the colored at 2				11	incl mobile bund							
How many mobile bund		n the required test schedule?				11								
	ncluded in the bund test s	chedule?				Yes								
		ed witin the required test schedule?				1								
	te are included in the inte					1								
	nps are integrity tested wategrity failures in table I													
	bers have high level liquid					Yes								
If yes to Q11 are these	failsafe systems included	in a maintenance and testing program	me?			Yes	Managed by Facilities Dept.							
_	Fable B1. Cummanı datail	s of bund /containment structure integ	with took	7										
<u> </u>	able b1. Summary detail	s or build / containment structure integ	inty test											
														Results of
									Integrity reports					retest(if ir
Bund/Containment									maintained on		Integrity test failure		Scheduled date	
structure ID	Туре	Specify Other type	Product containment	Actual capacity	Capacity required*	Type of integrity test	Other test type	Test date	site?	Results of test	explanation <50 words	Corrective action taken	for retest	reporting
Bund No. 1 Bund No. 2	reinforced concrete reinforced concrete	N/a N/a	oil	17.32m3 10.26m3	13.75m3 8.47m3	Hydraulic test Hydraulic test		29th and 30th Marc 29th and 30th Marc		Pass		SELECT		+
Bund No. 3	reinforced concrete	N/a	oil	9.38m3	6.38m3	Hydraulic test		29th and 30th Marc		Pass				+
Bund No. 4	reinforced concrete	N/a	sodium hydroxide	32.46m3	22m3	Hydraulic test		29th and 30th Marc	Yes	Pass				
Bund No. 5	reinforced concrete	N/a	hydrochloric acid	32.46m3	24.75m3	Hydraulic test		29th and 30th Marc		Pass				
Bund No. 6 Bund No. 7	reinforced concrete reinforced concrete	N/a N/a	solvent waste hydrofluoric acid waste	40.41m3 26.13m3	33m3 17.95m3	Hydraulic test Hydraulic test		29th and 30th Marc 29th and 30th Marc		Pass				+
Bund No. 8	prefabricated	N/a	oil	2.66m3	1.54m3	Hydraulic test		29th and 30th Marc		Pass				+
Bund No. 9	reinforced concrete	N/a	oil	35.7m3	32.34m3	Hydraulic test		29th and 30th Marc	Yes	Pass				
Bund No. 10	reinforced concrete	N/a	hydrofluoric acid waste	18m3	8.58m3	Hydraulic test		29th and 30th Marc		Pass				
Bund No. 11	reinforced concrete ply with 25% or 110% containment	N/a	solvent waste	2.6m3	0.66m3	Hydraulic test	Commentary	29th and 30th Marc	Yes	Pass		SELECT		
Has integrity testing ber	en carried out in accorda	nce with licence requirements and are	all structures tested in line				Commentary	1						
with BS8007/EPA Guida				bunding and storage guide	lines	Yes								
	systems to remote contain					SELECT	Not applicable							
Are channels/transfer s	systems compliant in bot	integrity and available volume?				SELECT	Not applicable	_						
Pipeline/undergro	ound structure testing							=						
		tegrity testing on underground structur	res e.g. pipelines or sumps et	? if yes please fill out table :	2 below listing all									
	s and pipelines on site <b>wh</b> , testing frequency perioc	ich failed the integrity test				Yes 3 years								
riease provide integrity	resting frequency perior					5 years								
				_										
Tal	ble B2: Summary details	of pipeline/underground structures into	egrity test		1			I	I	1		1		
				Type of secondary containment										
				containment				Integrity test						
Structure ID	Type system	Material of construction:	Does this structure have Secondary containment?		Tuno integrity testing	Integrity reports maintained on site?	Results of test	failure explanation <50 words	Corrective action taken	Scheduled date for retest	Results of retest(if in current			
SW05	Storm Storm	concrete	No	SELECT	Type integrity testing Hydraulic	Yes	Pass Pass	~50 Words	ravell	ioi retest	reporting year) SELECT	•		
Foul drainage system		Mix (concrete, uPVC and Clay)	No		CCTV	Yes	Mix		All repair recomme	Retested in Dece		]		
									1	1		1		
							7							

# Groundwater/Soil monitoring template Lic No: P0224-02 Year

- $\ensuremath{^{1}}$  Are you required to carry out groundwater monitoring as part of your licence requirements?
- 2 Are you required to carry out soil monitoring as part of your licence requirements?
- $^{3}$  Do you extract groundwater for use on site? If yes please specify use in comment section
- $^{4}\,$  Is there contaminated land and /or groundwater on site? If yes please answer q's 5-12  $\,$
- 6 Have actions been taken to address contamination issues?If yes please summarise remediation strategies proposed/undertaken for the site
- 7 Please specify the proposed time frame for the remediation strategy

8

Is there a licence condition to carry out/update ELRA for the site?

- 9 Has any type of risk assesment been carried out for the site?
- 10 Has a Conceptual Site Model been developed for the site?
- 11 Have potential receptors been identified on and off site?
- 12 Is there evidence that contamination is migrating offsite?

	Comments
yes	
no	
	two pumping wells on
yes	site
yes	
yes	
	Full site TCE assessment
yes	carried out as requested
N/A	As above
	Not explicitly called for in
	the IPPC licence but
	requested by the EPA in
no	2012
yes	
yes	
yes	
no	

2012

**Table 1: Upgradient Groundwater monitoring results** 

											Upward trend in
										% change in	pollutant
	Sample									average	concentration over last
Date of	location	Parameter/			Maximum	Average				concentration	5 years of monitoring
sampling	reference	Substance	Methodology	Monitoring frequency	Concentration++	Concentration+	unit	GTV's*	IGV	previous year +/-	data
21/02/12											
and											
16/08/12	GW06	pН	pH electrode	Biannual	7.17	6.885	pH units	N/A	6.5-9.5	-9	No
21/02/12											
and											
16/08/12	GW06	COD	ISO 6060-1989	Biannual	20	16	mg/l	N/A	N/A	19	No
			SO/TR 11905-2: 1997. Water								
			quality – Determination of								
			nitrogen –Part 2:Determination								
			of bound nitrogen, after								
21/02/12			combustion and oxidation to								
and			nitrogen dioxide,								
16/08/12	GW06	Total Nitrogen	chemiluminescence detection.	Biannual	2	1.68	mg/l	N/A	N/A	16	No
			Method 3125B, AWWA/APHA,								
21/02/12			20th Ed., 1999 (Al, As, Cd, Cr, Cu,								
and			Pb, Sn, Zn, Mn), , (Fe),(Ferrous							not detected in	
16/08/12	GW06	Aluminium	iron and Ferric iron)	Biannual	0.003	0.0015	mg/l	0.15	0.2	2011	No

Ground	water/Soi	il monitoring tem	plate		Lic No:	P0224-02		Year	201	2	
21/02/12											
and			Method 3125B, AWWA/APHA,								
16/08/12	GW06	Arsenic	20th Ed., 1999	Biannual	0.0008	0.00065	mg/l	0.0075	0.01	86	Yes
21/02/12											
and			Method 3125B, AWWA/APHA,								
16/08/12	GW06	Chromium	20th Ed., 1999	Biannual	0.0007	0.00035	mg/l	0.0375	0.03	-90	No
21/02/12											
and			Method 3125B, AWWA/APHA,								
16/08/12	GW06	Copper	20th Ed., 1999	Biannual	0.0013	0.00115	mg/l	1.5	0.03	15	No
21/02/12											
and			Method 3125B, AWWA/APHA,								
16/08/12	GW06	Lead	20th Ed., 1999	Biannual	0.0004	0.00035	mg/l	0.01875	0.01	-18	No
21/02/12											
and			Method 3125B, AWWA/APHA,							not detected in	
16/08/12	GW06	Tin	20th Ed., 1999	Biannual	0.001	0.0007	mg/l	N/A	N/A	2011	No
21/02/12			-				-				
and			Method 3125B, AWWA/APHA,								
16/08/12	GW06	Zinc	20th Ed., 1999	Biannual	0.062	0.0328	mg/l	N/A	0.1	-34	No
21/02/12			•				<u> </u>	,			
and			Method 3125B, AWWA/APHA,								
16/08/12	GW06	Manganese	20th Ed., 1999	Biannual	0.0027	0.00195	mg/l	N/A	0.05	-81	No
21/02/12		. 0.	,				O,	.,,			
and											
16/08/12	GW06	Chloroform	US EPA Method 8260b and 624	Biannual	9	7.5	ug/l	75	12	19	Yes
21/02/12	000	Cinorolomi	OS EL ALMERICA SEGOS ANA SE I	Sidilliadi		7.3	u <sub>b</sub> / .	,,,		120	. 63
and											
16/08/12	GW06	1 1 1 trichloroeth	US EPA Method 8260b and 624	Biannual	2	1.5	ug/l	N/A	N/A	200	No
21/02/12		2,2,2 (10110100011	22 2	S.G.IIIuui	-	1.5	~o/ '	14/73			
and											
16/08/12	GW06	his-(2-ethylheyyl)	US EPA Method 8260b and 624	Biannual	21	10.5	ug/l	N/A	8	-79	Yes
21/02/12	300	J.J (= Ctrrymexyr)				20.5	~B/ ·		-	1.3	. 00
and											
16/08/12	GW06	Conductivity	Conductivity probe	Biannual	1160	856	μS/cm	800-1875	1000μS/cm	-37	No
21/02/12		30.1000.11.17	conductivity probe	S.G.IIIuui	1100	030	, au, a	000 1073	2000μο/ επ	1	
and											
16/08/12	GW06	chloride	EPA methods 325.1 and 325.2	Biannual	167	124	mg/l	24-187.5	30	-35	No
21/02/12		3.1101.140			100		6/ .	2 . 107.5		1	
and											
16/08/12	GW06	nitrate	EPA methods 325.1 and 325.2	Biannual	7	6.22	mg/l	37.5	25	362	No
21/02/12		···········		S.G.IIIuui	T'	0.22		57.5			
and											
16/08/12	GW06	sulphate	EPA methods 325.1 and 325.2	Biannual	149	141	mg/l	187.5	200	-1	No
21/02/12	31100	Julphate	2	S.dillidar	143	171	1116/1	107.5		1	.10
and											
16/08/12	GW06	calcium	US EPA Method 6010B	Biannual	115	110	mg/l	N/A	200	-3	No
21/02/12	3000	calcium	OS EL A MECHOO OOTOB	Diamiluai	113	110	1118/1	IN/A	200		110
21/02/12 and											
and 16/08/12	CMUE	magnosium	US EPA Method 6010B	Biannual	18	18	ma/l	N/A	50	6	No
21/02/12	G WU6	magnesium	O2 FLY IMERIION DOTOR	Diailliudi	10	10	mg/l	IN/A	30	U	INU
and	CIMOS		LICEDA MARILA II COSCO	D:					_	20	
16/08/12	GWU6	potassium	US EPA Method 6010B	Biannual	3	3	mg/l	N/A	כ	-20	No

Groundy	water/Soil	monitoring tem	plate		Lic No:	P0224-02		Year	2012		
21/02/12											
and	CIMOS		US EDA MARIE AL COMOD	Discount.		06.5		450	450	24	N .
16/08/12 21/02/12	GW06	sodium	US EPA Method 6010B	Biannual	98	86.5	mg/l	150	150	-34	No
21/02/12 and											
16/08/12	GW07	рН	pH electrode	Biannual	7.92	7.92	pH units	N/A	6.5-9.5	No sample	No
21/02/12	01107	, p.,	pri creatione	Diamina.	7.52	7.52	pri dines	,,,	0.5 5.5	no sample	
and											
16/08/12	GW07	COD	ISO 6060-1989	Biannual	13	13	mg/l	N/A	N/A	No sample	No
			SO/TR 11905-2: 1997. Water								
			quality – Determination of								
			nitrogen –Part 2:Determination								
21/02/12			of bound nitrogen, after								
21/02/12 and			combustion and oxidation to nitrogen dioxide,								
and 16/08/12	GW07	Total Nitrogen	chemiluminescence detection.	Biannual	1	1	mg/l	N/A	N/A	No sample	No
21/02/12	G VV 0 /	Total Nitrogen	chemiaminescence detection.	Diailliuai	1	1	1116/1	IV/A	IN/A	140 Sample	INO
and			Method 3125B, AWWA/APHA,							1	
16/08/12	GW07	Arsenic	20th Ed., 1999	Biannual	0.0003	0.0003	mg/l	0.0075	0.01	No sample	No
21/02/12			,								
and			Method 3125B, AWWA/APHA,								
16/08/12	GW07	Chromium	20th Ed., 1999	Biannual	0.0012	0.0012	mg/l	0.0375	0.03	No sample	No
21/02/12											
and			Method 3125B, AWWA/APHA,								
16/08/12	GW07	Copper	20th Ed., 1999	Biannual	0.0015	0.0015	mg/l	1.5	0.03	No sample	No
21/02/12											
and			Method 3125B, AWWA/APHA,				,,				
16/08/12	GW07	Lead	20th Ed., 1999	Biannual	0.0002	0.0002	mg/l	0.01875	0.01	No sample	No
21/02/12 and			Mathod 2125B AMMA/A/ADHA								
16/08/12	GW07	Tin	Method 3125B, AWWA/APHA, 20th Ed., 1999	Biannual	0.0004	0.0004	mg/l	N/A	N/A	No sample	No
21/02/12	34407	1111	2001 20., 1999	Diailliuai	0.0004	0.0004	1116/1	IV/A	IN/A	110 Sample	110
21/02/12 and			Method 3125B, AWWA/APHA,								
16/08/12	GW07	Zinc	20th Ed., 1999	Biannual	0.0064	0.0064	mg/l	N/A	0.1	No sample	yes
21/02/12			•								
and			Method 3125B, AWWA/APHA,								
16/08/12	GW07	Manganese	20th Ed., 1999	Biannual	0.0011	0.0011	mg/l	N/A	0.05	No sample	No
21/02/12											
and		1			1					1	
16/08/12	GW07	Cis-1-2-Dichloroe	US EPA Method 8260b and 624	Biannual	4	4	ug/l	N/A	30	No sample	No
21/02/12											
and			un manage de la constitución de					L_	L	l	
16/08/12	GW07	Tetrachloroethen	US EPA Method 8260b and 624	Biannual	22	22	ug/l	7.5	70,40	No sample	yes
21/02/12											
and	CMOZ	1 1 1 +richlo+	LIS EDA Mothod 9360b and 634	Riannual	0		/I	NI/A	NI/A	No cample	No
16/08/12 21/02/12	GWU/	1,1,1 trichioroeth	US EPA Method 8260b and 624	Biannual	U	0	ug/l	N/A	N/A	No sample	No
21/02/12 and											
ailu			US EPA Method 8260b and 624	I	I	I				I	

Groundw	vater/Soi	I monitoring ten	nplate		Lic No:	P0224-02		Year	2012	2	
21/02/12											
and											
16/08/12	GW07	Conductivity	Conductivity probe	Biannual	520	520	μS/cm	800-1875	1000μS/cm	No sample	No
21/02/12											
and											
16/08/12	GW07	chloride	EPA methods 325.1 and 325.2	Biannual	12	12	mg/l	24-187.5	30	No sample	No
21/02/12											
and 16/08/12	CMOZ	nitrate	EPA methods 325.1 and 325.2	Biannual	4	4	ma/I	37.5	25	No cample	was
21/02/12	GW07	Illitrate	EPA Illetilous 323.1 aliu 323.2	Didililudi	4	4	mg/l	37.3	23	No sample	yes
and											
16/08/12	GW07	nitrite	EPA methods 325.1 and 325.2	Biannual	0	0	mg/l	0.375	0.1	No sample	No
21/02/12	01107	merice	Elittimethods 52512 and 52512	Sidifficati				0.575	0.12	ivo sample	
and											
16/08/12	GW07	sulphate	EPA methods 325.1 and 325.2	Biannual	59	59	mg/l	187.5	200	No sample	No
21/02/12											
and											
16/08/12	GW07	calcium	US EPA Method 6010B	Biannual	80	80	mg/l	N/A	200	No sample	No
21/02/12											
and											
16/08/12	GW07	magnesium	US EPA Method 6010B	Biannual	10	10	mg/l	N/A	50	No sample	No
21/02/12											
and									_		
16/08/12	GW07	potassium	US EPA Method 6010B	Biannual	3	3	mg/l	N/A	5	No sample	No
21/02/12 and											
16/08/12	GW07	sodium	US EPA Method 6010B	Biannual	15	15	mg/l	150	150	No sample	No
21/02/12	GW07	Soulum	OSEI A WIECIIOG GOLOB	biaiiiiuai	13	13	1116/1	130	130	NO Sample	NO
and											
16/08/12	GW08	рН	pH electrode	Biannual	7.22	6.955	pH units	N/A	6.5-9.5	-11	No
21/02/12		ľ									
and											
16/08/12	GW08	COD	ISO 6060-1989	Biannual	249	145	mg/l	N/A	N/A	258	No
			SO/TR 11905-2: 1997. Water								
			quality – Determination of								
			nitrogen –Part 2:Determination								
24 /02 /42			of bound nitrogen, after								
21/02/12 and			combustion and oxidation to nitrogen dioxide,								
16/08/12	GW08	Total Nitrogen	chemiluminescence detection.	Biannual	2	1.71	mg/l	N/A	N/A	10	No
21/02/12	54400	Total Nitrogell	enermanniescence detection.	Diamina	-	1./1	1115/1	IN/A	19/0	10	140
and			Method 3125B, AWWA/APHA,								
16/08/12	GW08	Arsenic	20th Ed., 1999	Biannual	0.0006	0.0005	mg/l	0.0075	0.01	100	No
21/02/12			,				3,				
and			Method 3125B, AWWA/APHA,								
16/08/12	GW08	Chromium	20th Ed., 1999	Biannual	0.0015	0.00075	mg/l	0.0375	0.03	-88	No
21/02/12											
and			Method 3125B, AWWA/APHA,								
16/08/12	GW08	Copper	20th Ed., 1999	Biannual	0.002	0.001	mg/l	1.5	0.03	100	No

Ground	water/Soil	monitoring te	mplate		Lic No:	P0224-02		Year	201	2	
21/02/12 and			Method 3125B, AWWA/APHA,								
16/08/12	GW08	Lead	20th Ed., 1999	Biannual	0.0002	0.00015	mg/l	0.01875	0.01	25	No
21/02/12 and 16/08/12	CWOS	Tin	Method 3125B, AWWA/APHA, 20th Ed., 1999	Biannual	0.0005	0.00025	mg/l	N/A	N/A	0	No
21/02/12	GWU6	11111	20th Ed., 1999	Didililudi	0.0003	0.00025	IIIg/I	N/A	IN/A	U	INU
and 16/08/12	GW08	Zinc	Method 3125B, AWWA/APHA, 20th Ed., 1999	Biannual	0.056	0.02865	mg/l	N/A	0.1	112	No
21/02/12 and			Method 3125B, AWWA/APHA,								
16/08/12	GW08	Manganese	20th Ed., 1999	Biannual	0.0036	0.00185	mg/l	N/A	0.05	-16	No
21/02/12 and 16/08/12	GW08	Conductivity	Conductivity probe	Biannual	672	574	μS/cm	800-1875	1000μS/cm	-41	No
21/02/12 and	CWOS	Conductivity	conductivity prose	Damida	072	574	μογοπ	000 1073	1000μ3/ επ	42	110
16/08/12	GW08	chloride	EPA methods 325.1 and 325.2	Biannual	29	27	mg/l	24-187.5	30	8	No
21/02/12 and 16/08/12	CMOS		EPA methods 325.1 and 325.2	Diagrama		5.53	ma ll	27.5	25	327	No
21/02/12	GW08	nitrate	EPA methods 325.1 and 325.2	Biannual	6	5.53	mg/l	37.5	25	327	No
and	CWOO	. 1.1	504 with the 225 4 and 225 2	8:	52	40.5		407.5	200		
16/08/12	GW08	sulphate	EPA methods 325.1 and 325.2	Biannual	52	49.5	mg/l	187.5	200	-4	No
21/02/12 and											
16/08/12	GW08	calcium	US EPA Method 6010B	Biannual	132	122	mg/l	N/A	200	3	No
21/02/12 and 16/08/12	GW08	magnesium	US EPA Method 6010B	Biannual	20	18.5	mg/l	N/A	50	6	No
21/02/12 and	01100	magnesium	OS ELA MECHOO 0010B	Diaminual	20	10.3	1116/1	INA	30	0	INO
16/08/12	GW08	sodium	US EPA Method 6010B	Biannual	18	17	mg/l	150	150	10	No

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

# **Table 2: Downgradient Groundwater monitoring results**

Date of	Sample location	Parameter/			Maximum	Average				% change in average	Upward trend in yearly average pollutant concentration over last 5 years of monitoring
sampling	reference	Substance	Methodology	Monitoring frequency	Concentration	Concentration	unit	GTV's*	IGV	previous year +/-	data
21/02/12											
and											
16/08/12	GW04	pH	pH electrode	Biannual	7.9	7.9	pH units	N/A	6.5-9.5	5	no
21/02/12											
and											
16/08/12	GW04	COD	ISO 6060-1989	Biannual	22	22	mg/l	N/A	N/A	-12	no

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

Ground	water/Soi	I monitoring te	mplate		Lic No:	P0224-02		Year	2012	
21/02/12										
and			Method 3125B, AWWA/APHA,							
16/08/12	GW04	Arsenic	20th Ed., 1999	Biannual	0.0007	0.0007	mg/l	0.0075	0.01	56 yes
21/02/12										
and			Method 3125B, AWWA/APHA,							
16/08/12	GW04	Lead	20th Ed., 1999	Biannual	0.0001	0.0001	mg/l	0.01875	0.01	-5 no
21/02/12										
and			Method 3125B, AWWA/APHA,							
16/08/12	GW04	Zinc	20th Ed., 1999	Biannual	0.013	0.013	mg/l	N/A	0.1	0 no
21/02/12										
and			Method 3125B, AWWA/APHA,							
16/08/12	GW04	Manganese	20th Ed., 1999	Biannual	0.0206	0.0206	mg/l	N/A	0.05	-40 no
21/02/12										
and										
16/08/12	GW04	Conductivity	Conductivity probe	Biannual	460	460	μS/cm	800-1875	1000μS/cm	-62 no
21/02/12										
and										
	GW04	chloride	EPA methods 325.1 and 325.2	Biannual	23	23	mg/l	24-187.5	30	15 yes
21/02/12										
and										
	GW04	sulphate	EPA methods 325.1 and 325.2	Biannual	73	73	mg/l	187.5	200	-83 no
21/02/12										
and										
16/08/12	GW04	calcium	US EPA Method 6010B	Biannual	111	111	mg/l	N/A	200	-52 no
21/02/12										
and							41			
16/08/12	GW04	magnesium	US EPA Method 6010B	Biannual	18	18	mg/l	N/A	50	-51 no
21/02/12										
and						.=		.=0	1.00	
16/08/12	GW04	sodium	US EPA Method 6010B	Biannual	17	17	mg/l	150	150	-6 no
21/02/12										
and	CMOAA	-11	all alastus da	Discount.	7.70	7.42	all make	21/2	6505	0
16/08/12 21/02/12	GWU4A	pH	pH electrode	Biannual	7.73	7.43	pH units	N/A	6.5-9.5	-8 no
21/02/12 and										
16/08/12	GW04A	COD	ISO 6060-1989	Biannual	112	90	mg/l	N/A	N/A	-66 no
10/00/12	G W U 4 A	COD	130 0000-1303	Dialilluai	112	30	IIIg/I	IN/A	IN/A	-00110
			Method 3125B, AWWA/APHA,							
21/02/12			20th Ed., 1999 (Al, As, Cd, Cr, Cu,							
and			Pb, Sn, Zn, Mn), , (Fe),(Ferrous							
	GW04A	Aluminium	iron and Ferric iron)	Biannual	0.0221	0.01105	mg/l	0.15	0.2	-8 no
21/02/12	3	,		Samual	0.0221	0.01103		0.13	U.E	0,110
and			Method 3125B, AWWA/APHA,							
16/08/12	GW04A	Arsenic	20th Ed., 1999	Biannual	0.0095	0.00655	mg/l	0.0075	0.01	-29 no
21/02/12		c			0.0033	0.00000	6/ .	0.0073	1	25,
and			Method 3125B, AWWA/APHA,							
16/08/12	GW04A	Chromium	20th Ed., 1999	Biannual	0.0009	0.00045	mg/l	0.0375	0.03	-89 no
21/02/12					0.0003	0.000.5		0.0373	1	
and			Method 3125B, AWWA/APHA,							
	GW04A	Copper	20th Ed., 1999	Biannual	0.001	0.0005	mg/l	1.5	0.03	-75 no

Grounav	vater/Soil	monitoring ten	nplate		Lic No:	P0224-02		Year	2012		
21/02/12											
and			Method 3125B, AWWA/APHA,								
16/08/12	GW04A	Lead	20th Ed., 1999	Biannual	0.0003	0.0002	mg/l	0.01875	0.01	C	no
21/02/12											
and			Method 3125B, AWWA/APHA,								
	GW04A	Zinc	20th Ed., 1999	Biannual	0.022	0.0148	mg/l	N/A	0.1	-55	no
21/02/12											
and											
	GW04A	Iron	US EPA Method 6010B	Biannual	0.0543	0.02715	mg/l	N/A	0.2	-72	no
21/02/12											
and			Method 3125B, AWWA/APHA,								
16/08/12	GW04A	Manganese	20th Ed., 1999	Biannual	0.143	0.11135	mg/l	N/A	0.05	-16	no
21/02/12											
and											
16/08/12	GW04A	Ferric Iron	DIN 38405 D17	Biannual	0.0919	0.0731	mg/l	N/A	N/A	-25	no
21/02/12											
and		1				1			1 .	not detected in	
16/08/12	GW04A	Phenanthrene	US EPA Method 8260b and 624	Biannual	1	0.5	ug/l	N/A	N/A	2011	no
21/02/12						1					
and		1 .				1					
	GW04A	Conductivity	Conductivity probe	Biannual	744	641	μS/cm	800-1875	1000μS/cm	36	no
21/02/12											
and		1									
	GW04A	chloride	EPA methods 325.1 and 325.2	Biannual	22	21	mg/l	24-187.5	30	-22	no
21/02/12											
and		1				1					
	GW04A	sulphate	EPA methods 325.1 and 325.2	Biannual	110	105.5	mg/l	187.5	200	-6	no
21/02/12											
and		1									
16/08/12	GW04A	calcium	US EPA Method 6010B	Biannual	122	111.5	mg/l	N/A	200	45	no
21/02/12											
and							<i>n</i>				
	GW04A	magnesium	US EPA Method 6010B	Biannual	35	29	mg/l	N/A	50	21	no
21/02/12											
and							<i>n</i>	l	_		
	GW04A	potassium	US EPA Method 6010B	Biannual	3	1.5	mg/l	N/A	5	-63	no
21/02/12		1				1					
and	C14/0.4.4		US EDA MARILA I COMOD								
	GW04A	sodium	US EPA Method 6010B	Biannual	14	14	mg/l	150	150	-75	no
21/02/12		1				1					
and	CULOF	1	Late at a second	Discount of	7.00	l	.11 .25		6505		
16/08/12	GW05	pH	pH electrode	Biannual	7.68	7.54	pH units	N/A	6.5-9.5	-7	no
21/02/12											
and	CWOF	con	150 5050 1000	Discount of	50		/1			366	
16/08/12	GW05	COD	ISO 6060-1989	Biannual	53	34.5	mg/l	N/A	N/A	360	no
			Mothod 212ED, AMANA /ADUA			1					
21/02/12			Method 3125B, AWWA/APHA,								
21/02/12			20th Ed., 1999 (Al, As, Cd, Cr, Cu, Pb, Sn, Zn, Mn), , (Fe),(Ferrous								
and				1	1	1		1	1		

Ground	water/Soi	il monitoring tem	plate		Lic No:	P0224-02		Year	2012	Year 2012			
21/02/12													
and			Method 3125B, AWWA/APHA,										
16/08/12	GW05	Arsenic	20th Ed., 1999	Biannual	0.0003	0.0003	mg/l	0.0075	0.01	20	no		
21/02/12													
and			Method 3125B, AWWA/APHA,										
16/08/12	GW05	Chromium	20th Ed., 1999	Biannual	0.0009	0.00045	mg/l	0.0375	0.03	-89	no		
21/02/12													
and			Method 3125B, AWWA/APHA,										
16/08/12	GW05	Copper	20th Ed., 1999	Biannual	0.0013	0.00115	mg/l	1.5	0.03	-23	no		
21/02/12													
and			Method 3125B, AWWA/APHA,										
16/08/12	GW05	Lead	20th Ed., 1999	Biannual	0.0007	0.00055	mg/l	0.01875	0.01	124	no		
21/02/12			-										
and			Method 3125B, AWWA/APHA,										
16/08/12	GW05	Tin	20th Ed., 1999	Biannual	0.0007	0.00035	mg/l	N/A	N/A	0	no		
21/02/12			•				<u> </u>						
and			Method 3125B, AWWA/APHA,										
16/08/12	GW05	Zinc	20th Ed., 1999	Biannual	0.04	0.02305	mg/l	N/A	0.1	84	no		
21/02/12								.,,	-	1			
and			Method 3125B, AWWA/APHA,							1			
16/08/12	GW05	Manganese	20th Ed., 1999	Biannual	0.0149	0.01465	mg/l	N/A	0.05	-32	no		
21/02/12				S.G.III GUI	0.0145	0.01703	6/ .	14/73	0.03	1			
and													
16/08/12	GW05	Chloroform	US EPA Method 8260b and 624	Biannual	1	1	ug/l	75	12	-86	no		
21/02/12	30003	Cilioroloitii	OS EL A MECHOU OZOOD AITU OZ4	Diaminai	<u> </u>		иத/1	1/3	14	-80	110		
and										1			
16/08/12	GW05	Cis-1-2-Dichloroo	US EPA Method 8260b and 624	Biannual	347	310	ug/l	N/A	30	508	no		
21/02/12	2003	CI3-1-2-DICITIOTOE	55 2. 7. Wictilou 52555 and 524	Diamilia	347	310	ug/1	IN/A	30	300			
and													
16/08/12	GW05	Trans-1-2-dichlore	US EPA Method 8260b and 624	Biannual	2	2	ug/l	N/A	30	-96	no		
21/02/12	GW03	11a115-1-2-ulCillOI1	OS LI A MELITOU 82000 ailu 824	Diamiluai	-   -		ug/i	IN/A	30	-90	110		
21/02/12 and													
and 16/08/12	GW05	Trichloroethene	US EPA Method 8260b and 624	Biannual	1120	021	ug/l	7.5	70.10	4.4	no		
21/02/12	GVVUD	munoroetnene	03 Li'A MELITOU 62000 dilu 624	Didilliudi	1120	831	ug/l	7.5	70,10	44	110		
21/02/12 and										not detected in			
and 16/08/12	CMOE	4-Nitrophenol	US EPA Method 8260b and 624	Biannual	6	2	ug/l	N/A	0.5	2011	no		
21/02/12	GWUS	4-Mitrophenor	03 LFA MELITOU 62000 dila 624	Diailliudi	D	3	ug/l	IN/A	0.3	2011	110		
21/02/12 and										1			
and 16/08/12	CMOE	Conductivity	Conductivity probo	Riannual	660	527	μS/cm	900 1075	1000μS/cm		no		
21/02/12	GWUS	Conductivity	Conductivity probe	Biannual	DDU	52/	μο/τιπ	800-1875	τυυυμ5/cm	-9	110		
and	CMOF	chlorid -	EDA mothodo 225 4 1 225 2	Diannual	20	26.5	ma/I	24 407 5	20	1	20		
16/08/12	GWU5	chloride	EPA methods 325.1 and 325.2	Biannual	28	26.5	mg/l	24-187.5	30	-20	no		
21/02/12										1			
and	CMOE		EDA			4 505	/1	27.5	25				
16/08/12	GW05	nitrate	EPA methods 325.1 and 325.2	Biannual	2	1.585	mg/l	37.5	25	324	no		
21/02/12													
and	1			L		I				1			
16/08/12	GW05	sulphate	EPA methods 325.1 and 325.2	Biannual	91	90	mg/l	187.5	200	-1	no		
21/02/12										1			
and													
16/08/12	GW05	calcium	US EPA Method 6010B	Biannual	91	90.5	mg/l	N/A	200	1	no		

Ground	water/Soil n	nonitoring tem	plate		Lic No:	P0224-02		Year	2012	
21/02/12 and 16/08/12	GW05	magnesium	US EPA Method 6010B	Biannual	16	15.5	mg/l	N/A	50	11 no
21/02/12 and 16/08/12	GW05	potassium	US EPA Method 6010B	Biannual	4	3.5	mg/l	N/A	5	-4 no
21/02/12 and 16/08/12				Biannual	25		mg/l	150	150	-2 no
							SELECT			SELECT

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

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

(DWS)

Groundwater

Surface

regulations

(private supply)

Drinking water (public supply)

Surface water Compare to Surface water Environmental Quality Standards

Surface

Receptor based Water Quality standards should be used in addition to the GTV e.g. if the site is

Surface

Recultions

(private supply)

Drinking water (public supply)

Supply) standards

Groundw	/ater/Soil m	onitoring templa	ate		Lic No:	P0224-02			Year	2012	
Table 3: S	Soil results										
Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration	Average Concentration		unit			
							SELECT				
							SELECT				
						•					
-		•		•	-	•	•		-		
·		•				•			- ]		

Environmental Liabilities template Lic No: P0224-02 Year 2012

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

			Commentary
1	ELRA initial agreement status	Not required by licence	Even though it is not a requirement of the licence, an ELRA and Financial Provisions letter was submitted to the Agency following a request at the end of 2012 with regard to the Analog Devices internal reorganisation.
2	ELRA review status		
3	Amount of Financial Provision cover required as determined by the latest ELRA		
4	Financial Provision for ELRA status		
5	Financial Provision for ELRA - amount of cover		
6	Financial Provision for ELRA - type		
7	Financial provision for ELRA expiry date		
8	Closure plan initial agreement status		
9	Closure plan review status		
10	Financial Provision for Closure status		
11 12	Financial Provision for Closure - amount of cover		
13	Financial Provision for Closure - type		
13_	Financial provision for Closure expiry date		

	Environmental Management Programme/Continuous Improvement Programme template		Lic No:	P0224-02	Year
	Highlighted cells contain dropdown menu click to view		Additional Information		
1			Analog Devices operates an Envir (EMS) which is independently cer		
	Do you maintain an Environmental Management System (EMS) for the site. If yes, please detail in additional information	Yes	environmental management stan	dard ISO14001.	
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			

Objective Category	Target	Status (% completed)	How target was progressed	Responsibility	Intermediate outcomes
objective Category	lalget	Status (% completeu)	Analog brought in an expert	Responsibility	intermediate outcomes
			consulting firm to carry out a		
			complete survey of the		
			effluent system. This survey		
			took into account the		
	Complete a full review of the existing effluent		existing plant IPPC licence		
	treatment system with a view to improving	Initial draft is complete	requirements, identification		
	efficiency and managing all site waste streams	and report has been	of parameters of concern at		
	while maintaining compliance with the IPPC	submitted to Analog for	risk of discharge licence		Systematic review of effluent
ncrease water use efficiency and reduce wastewater volume.	licence.	review	breach taking into account a	Facilities Dept.	system
					Live data on water flow now
	Implement a more comprehensive water metering		16 new water meters		being fed to the Facilities
ncrease water use efficiency and reduce wastewater volume.	system for the site.	95%	installed on the site.	Facilities Dept.	Department
			Detailed investigation		
			carried out in 2011 on		
			fluoride streams on the site.		
			Project was implemented		
			and identified drain lines		
			were diverted to alternative		
	Deduce the executive differential levels to				
	Reduce the normalised fluoride levels in		treatment. Fluoride levels		
	wastewater to 6.35E-06 kgs per cm2 of silicon x		have now dropped to below		
eduction of emissions to Wastewater	mask layers or below.	100	the target -	Engineering dept.	Reduced emissions
			New alarm system put in		
			place in the Fab to inform		
			technicians if there is a more		
			than normal amount of		
			sulphuric acid going to drain.		
			This aids them in controlling		
			the number of sulphuric		
			tanks dumped to the		
					Increased compliance with
	Calabata and other assessment	100	neutralisation system at any		Increased compliance with
eduction of emissions to Wastewater	Sulphate reduction programme	100	one time.	Engineering dept.	licence conditions
			Training presentation was		
			developed using real life		
			examples of effluent issues		
			and rolled out to employees		
			on an e-learning platform.		
			100% compliance with the		
	IPPC licence training awareness, focusing on		assessment was required in		Raised awareness of the
	effluent management was rolled out to all		order for employees to		effect of chemical handling or
eduction of emissions to Wastewater	technicians and engineers	99	complete the course	EHS Dept.	effluent streams
			Weekly review of		
			drains/chemistries of orange		
	Drain line review incorporated into the change		Fab with the relevant		All drain drawings updated in

Environmental Management Programme/Continuou	us improvement Programme tempiate			Lic No:	P0224-02	Ye
			TOC monitoring system now			1
			in place monitoring the			1
			effluent into the treatment			1
			system to act as an early			1
			warning system for any			1
			unusual solvent streams that		Live 24/7 TOC monitoring	1
	Early warning system for changes in effluent TOC		may cause issues		data on streams entering the	1
Reduction of emissions to Wastewater	trend	100	downstream.	EHS/Facilities	effluent treatment system.	1
The second of th	a con		Somoti Carri.		emacine treatment system.	1
			Site map and licence			1
	Ensure that contractors are fully aware of the		conditions communicated to			1
	requirements of the IPPC licence when carrying		the project managers for the		Compliance with noise limits	1
Reduction in noise emissions from the site.	out the demolition project on the site.	100	demolition project.	Facilities Manager	during demolition project	1
and the site.	project on the site.		Annual review of		Updated and relevant	1
			environmental related		environmental management	1
Vaintain and improve Environmental Manager	Review of ISO 14001 related procedures carried out	100	environmental related procedures	Snr FHS Engineer	environmental management procedures	1
Maintain and improve Environmental Management System		1-00		Snr EHS Engineer	procedures	1
			Matrix system set up to		Undated and a 1	1
	Bull Assessment Con		summaries and maintain		Updated and relevant	1
	Full visibility of all waste related		records of waste	EU 6	environmental waste permit	1
Naste - Site waste management documentation system	transport/treatment	100	subcontractors details	EHS Dept.	records	1
	Nowseasilis		Now him ' '		Ingressed	1
	New recycling stream set up for waste clean plastic	100	New bins and signage in all		Increased recycling of plastic	1
Reduce tonnage of waste being disposed to landfill	in the Fab area.	100	production gowning areas	Snr EHS Engineer	from production areas	1
			L			1
			Energy reduction project for			1
			the Nitrogen plant – new			1
			software system being			1
			implemented that reduced			1
			the amount of nitrogen			1
			being vented and therefore			1
			reduced the load on the			1
ncreased energy efficiency.	Nitrogen plant optimisation	100	compressor.	Facilities Department	Saving of 1334KWhr per day	1
	managen plant optimisation	_00	2011p1 C3301.	. semices pepartificall	String of 1334KWill per uay	1
			A Beta version of an			1
			Automatic Fault detection			1
						1
			and diagnostic software tool			1
			(AFDD) for the HVAC systems			1
			was installed on site. This			1
			tool was developed as part			1
			of an I2E2 project on site.			1
			This resulted in the			1
			detection of faults on two			1
			office AHU's, which were		Savings of €40K per AHU	1
ncreased energy efficiency.	Fault Detection and Diagnostic tool implementation	50	subsequently fixed.	Facilities Department	(thermal and electricity)	1
			New web based system			1
			installed. Next phase is to			1
	Implementation of a software system for electricity		add additional electricity		New web based software	1
ncreased energy efficiency.	metering on the site	50	meters	Facilities Department	system installed	1
			1			1
			Boiler optimisation			1
			programme continuation.			1
			Ongoing regression analysis			1
			on data to identify excessive			1
			gas consumption allowing			1
ncreased energy efficiency.	Boiler management	Ongoing programme	for early intervention	Facilities Department		1
	soner management	Sugaring programme	To carry intervention	. domaca pepartinent		1
			Facilities Department			1
			working through R22 phase			1
						1
			out project in a systematic		Full elter laws	1
	Full contact of the Contact of		manner. Quarterly reviews		Full site inventory of all R22	1
	Full replacement of all R22 units or replacement of		of progress with relevant		units. Systematic programme	1
22 Replacement Programme	R22 refrigerant with drop in refrigerants.	Ongoing programme	stakeholders.	Facilities Department	for R22 replacement in place	4
			All Englishes's			1
			All Facilities units are on an			1
			electronic system with full			1
			logs being maintained. Fab			1
			systems are being managed			1
			on a paper based system			1
			with a long term goal of		Software system in place to	1
						all I
			electronic system		monitor and track gas usage	/
	Full site inventory and maintenance records of all F-		electronic system implementation.		monitor and track gas usage in refrigeration units for the	

Noise monitoring summary report	Lic No:	P0224-02	Year	2012
			7	
1 Was noise monitoring a licence requirement for the AER period?		Yes	<b>⊥</b>	
If yes please fill in table N1 noise summary below			_	
	Noise			
2 Was noise monitoring carried out using the EPA Guidance note including completion of the	Guidance	Yes		
"Checklist for noise measurement report" included in the guidance note as table 6?	note NG4			
3 Does your site have a noise reduction plan		Yes	1	
4 When was the noise reduction plan last updated?		Annually		
5 Have there been changes relevant to site noise emissions (e.g. plant or operational changes) s noise survey?	ince the last	No		

Table N1: Noise mo	onitoring summary									
Date of monitoring	Time period	Noise sensitive location -NSL (if applicable)	LA <sub>eq</sub>	LA <sub>90</sub>	LA <sub>10</sub>	LA <sub>max</sub>	Tonal or Impulsive noise* (Y/N)	If tonal /impulsive noise was identified was 5dB penalty applied?	Comments (ex. main noise sources on site, & extraneous noise ex. road traffic)	Is <u>site</u> compliant with noise limits (day/evening/night)?
1st/2nd Oct 2012	Day 13:15	Location 1	59.8	56.4	61.4	76.7	No	No	Traffic on mian road, wind in trees	Yes
	12:00 Re-measured									
	due to bad weather						No	No		Yes
4/10/2012	conditions	Location 1	57.5	54.2	59.4	71.5			Traffic on main road and service road	
	Day 15:15	Location 1	58.4	55.4	60.4	68.7	No	No	Traffic on main road	Yes
	Day 17:15	Location 1	58.9	56.2	60.8	68.9	No	No	Traffic on main road, traffic on service road	Yes
1st/2nd Oct 2012	Night 23:30	Location 1	52.5	48.8	55.2	64.9	No	No	Traffic main and service road, plant noise	Yes
1st/2nd Oct 2012	Night 01:30	Location 1	51.8	48	54.4	63.3	No	No	Some traffic, car engine on, plant	Yes
1st/2nd Oct 2012	Day 12:45	Location 2	62.3	47	64.8	85.9	No	No	Consruction noise, plant at times,traffic	Yes
	11.15 Re-measured									
4/40/2042	due to bad weather		62.2	45.0		05.4	No	No	Total Control of the	Yes
4/10/2012	conditions	Location 2	63.2	45.2	64.8	86.1	No	No	Traffic on service road, distant traffic, plane, plant in quiet periods	Yes
1st/2nd Oct 2012 1st/2nd Oct 2012	Day 14:45 Day 16:45	Location 2 Location 2	63.3 60.9	48.6 50.4	65.6 63.4	83.8 82.2	No	No No	Construction noise, sirens, plant at times, traffic  Traffic on main road. service road traffic	Yes
	Night 00:00	Location 2	58.7	43.4	55.4	85.4	No No	No No	Plant noise, litle traffic	Yes
	Night 01:00	Location 2	43.4	42.6	44	57.1	No	No	Plant noise, litle traffic	Yes
	Day 13:45	Location 3	66.9	55.4	60.8	94.2	No.	No.	Traffic on service road, fork lift truck,plant, construction.	Yes
	Day 15:50	Location 3	60.1	57.8	61.6	72.3	No	No	Plant from various construction sites, traffic on service road.	Yes
	Day 17:50	Location 3	58.5	56	60	72.4	No	No	Plant from various sites, traffic on service road.	Yes
	Night 23:00	Location 3	55.1	54.2	55.4	62.6	No	No	Plant from various sites, very little traffic	Yes
1st/2nd Oct 2012	Night 02:00	Location 3	54.5	53.8	54.8	57.1	No	No	Plant from various sites	Yes
	Day 13:30	Location 4	64.8	53.4	69.2	80.9	No	No	Traffic on service road, distant environmental, plant from various sites.	Yes
	Day 15:31	Location 4	65.1	53.2	69.4	80.8	No	No	Traffic on service road, distant traffic plant	Yes
	Day 17:30	Location 4	69.4	57.2	73	84.8	No	No	Service road very busy	Yes
1st/2nd Oct 2012	Night 23:15	Location 4	54.1	49.8	51.8	74.7	No	No	Plant from various sites, little traffic	Yes
1st/2nd Oct 2012	Night 01:45	Location 4	50	49.4	50.2	54.3	No	No	Plant from various sites, very litle traffic, only distant.	Yes
	Day 12:05	Location 5	60.3	50.6	62.2	79.4	No	No	Wind in trees at times, distant environmental, construction noise, traffic, plant at times.	Yes
4/10/2012	11:00 Re-measured due to bad weather conditions	Location 5	62.1	48.4	63	89.3	No	No	Service road traffic, distant traffic, plant in quiet periods.	Yes
1st/2nd Oct 2012	Day 16:05	Location 5	61	52.4	62.4	83	No	No	Construction , service road traffic, distanttraffic, plant.	Yes
1st/2nd Oct 2012	Day 18:05	Location 5	56.8	49	59.4	74.9	No	No	Plant, traffic on service road, distant traffic	Yes
1st/2nd Oct 2012	Night 00:45	Location 5	47.1	46	47.8	56.8	No	No	Plant, very little traffic, distant noise.	Yes
1st/2nd Oct 2012	Night 02:30	Location 5	48.5	45.6	48	64.6	No	No	Plant, car on service road, distant traffic/environmental	Yes
1st/2nd Oct 2012	Day 13:00	Location 6	59.2	52	61.8	74.5	No	No	Traffic on main road, traffic on service road	Yes
1st/2nd Oct 2012	Day 15:00	Location 6	57.1	51.4	60.4	68.7	No	No	Traffic on main road, traffic on service road	Yes
1st/2nd Oct 2012	Day 17:00	Location 6	55.6	51.6	58.6	67.1	No	No	Traffic on main road, traffic on service road	Yes
1st/2nd Oct 2012	Night 23:45	Location 6	48	44.2	48.8	60.6	No	No	Traffic on main road, traffic service road, plant slight	Yes
1st/2nd Oct 2012	Night 01:15	Location 6	46	42.6	49.2	54.2	No	No	Very little traffic, slight plant noise, general environmental	Yes
4/10/2012	11:30	Location 6	55.3	48	58.6	69.7	No	No	Traffic on service road and main road (not v.busy)	Yes
1st/2nd Oct 2012	Day 12:25	Location 7	64.1	51.4	67.4	80.3	No	No	Wind in trees, traffic, distant environmental	Yes
4/10/2012	10:45 Re-measured due to bad weather conditions	Location 7	63.5	49.4	66.6	80.2	No	No	Traffic on service road, distant traffic	Yes
1st/2nd Oct 2012	Day 16:20	Location 7	63.2	54.8	66.2	76.1	No	No	Traffic on service road, distant traffic, trees	Yes
1st/2nd Oct 2012	Night 00:15	Location 7	55.4	42.8	60	73.4	No	No	Very little traffic, general environmental noise, distant	Yes
1st/2nd Oct 2012	Night 02:15	Location 7	43.6	41.6	45	57.7	No	No	Distant environmental, distant plant	Yes

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

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

N/A

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

Noise levels are within the levels stated in the IPPC licence for noise attributable to the Analog Devices site at noise sensitive locations. No distinct tonal noise was measured at these locations. Demolition work at the site has not increased the noise emission to relevant locations.

### Resource Usage/Energy efficiency summary

Lic No:

P0224-02

Year

2012

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)

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

	Additional information
2042 5445	
2012 EMP review	
Yes	LIEN
Yes	0.1

Table R1 Energy usag	e on site			
Energy Use	Previous year	Current year	compared to	Energy Consumption +/- % vs overall site production*
Total Energy Used (MWHrs)	88399	87690		
Total Energy Generated (MWHrs)	0	0		
Total Renewable Energy Generated (M	0	0		
Electricity Consumption (MWHrs)	64774	64699		
Fossil Fuels Consumption:				
Heavy Fuel Oil (m3)				
Light Fuel Oil (m3)	2.316	2.316		
Natural gas (MWhr)	23625	22990		
Coal/Solid fuel (metric tonnes)	None	None		
Peat (metric tonnes)	None	None		
Renewable Biomass	None	None		
Renewable energy generated on site	None	None		

<sup>\*</sup> 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		
						Volume used i.e not		
			Production +/- %			discharged to		
			compared to	Water consumption	Volume Discharged	environment e.g.		
	Water extracted	Water extracted	previous reporting	+/-% vs overall site	back to	released as steam		
Water use	Previous year m3/yr.	Current year m3/yr.	year**	production	environment(m <sup>3</sup> yr):	m3/yr	Unaccounted for Water:	
Groundwater	33643	31676			191604			
Surface water	None							
Public supply	336427	316762						
Recycled water	None	None						
Total								

<sup>\*</sup> 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.

<sup>\*\*</sup> 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)	363	3	186	53	121
Non-Hazardous (Tonnes)	4727	118	303	543	3763

Resource	source Usage/Energy efficiency summary				Lic No:	P0224-02		Year	2012
	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
	Energy audit recommendations are ev	aluated for feasibility. All	feasible projects are lis	sted under the EMP	section				

	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:	P0224-02		Year	2012			1				
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						]								
Table 1	1 Complaints summary													
			Brief description of					1						
			complaint (Free txt <20	Corrective action< 20			Further							
Date	Category	Other type (please specify)	words)	words	Resolution status	Resolution date	information	4						
	SELECT SELECT				SELECT SELECT			4						
	SELECT				SELECT			1						
	SELECT				SELECT									
	SELECT				SELECT									
Total complaints														
open at start of														
reporting year Total new														
complaints														
received during														
reporting year														
Total complaints														
closed during														
reporting year Balance of		=												
complaints end of														
reporting year														
		_												
		Incidents				]								
Harris and Incidenta	and the state of t	ala a como O Dia a a Hata all instal			Additional informa	ation I								
Have any incidents	occurred on site in the current repor year in Tab		ents for current reporting	Yes										
	year iii rab	ic 2 below	1	163		J								
*For information	on on how to report and what													
	stitutes an incident	What is an incident												
		•	<u>.</u>											
Table 2 Incidents sun	nmary	1			1	1	T	1	1	1			1	
			Incident category*please			Other cause(please	Activity in progress at time			Corrective action<20	Preventative action <20		Resolution	Liklihood 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
			Total to governo							Investigation				
										revealed that mains				
										water on the site has				
										a similar conductivity				
						Conductivity				level. No				
					Other (edd	levels were				contamination was				
8th/9th May 2012	Trigger level reached	SW06	1. Minor	Water	Other (add details)	consistent with mains water	Normal activities	FDA	New	evident at the time of sampling.	N/A	Complete	N/A	Low
othy oth Way 2012	Trigger level reactied	34400	1. WIIIO	water	uctansj	mams water	Normal activities	LIA	New	or sampling.	14/15	complete	N/A	LOW
											Parts for			
											immediate			
											repair are now kept on			
										Sump high level	site to ensure			
										alarm that caused	issues are			
					Plant or					the issue was	dealt with			
28th May 2012	Breach of ELV	PW01	1. Minor	Sewer	equipment issues		Normal activities	EPA	New	repaired	straight away.	Complete	15/08/2012	Low
1										1	Low flow alarm		1	
						Abnormally low				1	installed on		1	
						outflow in				1	effluent		1	
					Other (add	preparation for					leaving the			
6th August 2012	Breach of ELV	PW01	1. Minor	Sewer	details)	maintenance	Non Routine main	t EPA	New	None required	site	Complete	22/10/2012	Low
Total number of														
incidents current	2													
Total number of	3	1												
incidents previous														
year	10	]												
% reduction/														
increase	70% reduction	1												

WASTE SUMMARY	1				Lic No:	P0224-02		Year	2012			
ECTION A-PRTR O	ON SITE WASTE TREATMENT	F AND WASTE TRANSFERS	TAB- TO BE COMPL	ETED BY ALL IPPC AN	ID WASTE FACILITIES	PRTR facility log	<u>(on</u>	dropdown li	st click to see options			
CTION B- WASTE	E ACCEPTED ONTO SITE-TO	BE COMPLETED BY ALL IP	PC AND WASTE FACI	LITIES								
							Additional Information	on 1				
	ted onto your site for recovery or d tured through PRTR reporting)	disposal or treatment prior to red	overy or disposal within the	ne boundaries of your faci	lity ?; (waste generated within your	SELECT						
res please enter detai						SELECT		J				
						CC L COT						
I your site have any r	ejected consignments of waste in t	the current reporting year? If yes	s please give a brief explan	ation in the additional inf	ormation	SELECT						
Was waste	accepted onto your site that was a	generated outside the Republic	of Ireland? If yes please st	ate the quantity in tonnes	in additional information	SELECT						
					ide wastes generated at y							_
Licenced annual onnage limit for your	EWC code	Source of waste accepted	Description of waste accepted	Quantity of waste accepted in current	Quantity of waste accepted in previous reporting year (tonnes)	Reduction/Incr ease over	Reason for reduction/increase	Packaging Content (%)- only applies if the	Disposal/Recovery or treatment operation carried	Quantity of waste	Comments -	
site (total tonnes/annum)			Please enter an accurate and detailed	reporting year (tonnes)		previous year +/ - %	from previous reporting year	waste has a packaging component	out at your site and the description of this operation	remaining on site at the end		
tonnes/annumj			description - which			+/ - /6	reporting year	component	description of this operation	of reporting		
	European Waste Catalogue EWC codes		European Waste Catalogue EWC codes							year (tonnes)		
												-
ECTION C-TO BE C	COMPLETED BY ALL WASTE	FACILITIES (waste transfe	er stations, Composto	ers, Material recove	ry facilities etc) EXCEPT LANDF	FILL SITES						
ECTION C-TO BE C	COMPLETED BY ALL WASTE	FACILITIES (waste transfe	er stations, Composte	ers, Material recove	ry facilities etc) EXCEPT LANDF	FILL SITES				1		
	COMPLETED BY ALL WASTE	·	•	•		SELECT						
		·	•	•								
s all waste processing in		icence and approved by the Ager	ncy in place? If no please li	st waste processing infras	tructure required onsite	SELECT						
s all waste processing in s all waste storage infra loes your facility have r	nfrastructure as required by your li astructure as required by your licen relevant nuisance controls in place;	icence and approved by the Agence and approved by the Agency	ncy in place? If no please li	st waste processing infras	tructure required onsite	SELECT SELECT SELECT SELECT						
s all waste processing in s all waste storage infra loes your facility have r lo you have an odour m	nfrastructure as required by your lie astructure as required by your licen relevant nuisance controls in place nanagement system in place for you	icence and approved by the Agence and approved by the Agency	ncy in place? If no please li	st waste processing infras	tructure required onsite	SELECT SELECT SELECT SELECT SELECT						
all waste processing in all waste storage infra toes your facility have r to you have an odour n to you maintain a sludg	infrastructure as required by your lice astructure as required by your licen relevant nuisance controls in place; nanagement system in place for you ge register on site?	icence and approved by the Ager nce and approved by the Agency ? ur facility? If no why?	ncy in place? If no please li	st waste processing infras	tructure required onsite	SELECT SELECT SELECT SELECT						
all waste processing in all waste storage infra toos your facility have read you have an odour no you maintain a sludg	infrastructure as required by your licenstructure as required by your licen relevant nuisance controls in place in anagement system in place for you ge register on site?	icence and approved by the Ageic nce and approved by the Agency 7 rur facility? If no why?	ncy in place? If no please li	st waste processing infras	tructure required onsite	SELECT SELECT SELECT SELECT SELECT						
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is all waste processing in all waste storage infractors your facility have ro you have an odour m yo you maintain a sludg SECTION D-TO BE (able 2 Waste type)	infrastructure as required by your licens astructure as required by your licens relevant nuisance controls in place; nanagement system in place for you be register on site?  COMPLETED BY LANDFILL SI e and tonnage-landfill only	icence and approved by the Ageince and approved by the Agency?  ur facility? If no why?	ncy in place? If no please list vin place? If	st waste processing infras	tructure required onsite	SELECT SELECT SELECT SELECT SELECT						
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is all waste processing in all waste storage infra toos your facility have r to you have an odour no you maintain a sludget and to you maintain a sludget all to the control of your maintain as ludget all to the control of your maintain as ludget all to the control of your maintain as ludget all to the control of your maintain as ludget all to the control of your maintain as ludget all to the control of your maintain as ludget as lud	nfrastructure as required by your licen setructure as required by your licen relevant nuisance controls in place in anagement system in place for you ge register on site?  COMPLETED BY LANDFILL Si e and tonnage-landfill only  Authorised/licenced annual intake	icence and approved by the Agency ce and approved by the Agency cur facility? If no why?  ITES ONLY  Actual intake for disposal in	ncy in place? If no please list vin place? If	st waste processing infras	tructure required onsite	SELECT SELECT SELECT SELECT SELECT						
s all waste processing in all waste storage infra- toes your facility have r to you have an odour n to you maintain a sludg SECTION D-TO BE (Cable 2 Waste types Waste types permitted for disposal	nfrastructure as required by your licen setructure as required by your licen relevant nuisance controls in place in anagement system in place for you ge register on site?  COMPLETED BY LANDFILL Si e and tonnage-landfill only  Authorised/licenced annual intake	icence and approved by the Agency ce and approved by the Agency cur facility? If no why?  ITES ONLY  Actual intake for disposal in	ncy in place? If no please list vin place? If	st waste processing infras	tructure required onsite	SELECT SELECT SELECT SELECT SELECT						
s all waste processing in all waste storage infra- toes your facility have r to you have an odour n to you maintain a sludg SECTION D-TO BE (Cable 2 Waste types Waste types permitted for disposal	nfrastructure as required by your licensestructure and the second section of the second section of the section of the second section of the sec	icence and approved by the Agency ce and approved by the Agency cur facility? If no why?  ITES ONLY  Actual intake for disposal in	ncy in place? If no please list vin place? If	st waste processing infras	tructure required onsite	SELECT SELECT SELECT SELECT SELECT				Total disposal	Lined disposal	
is all waste processing in all waste storage infra soos your facility have r to you have an odour n to you maintain a sludgettion D-TO BE (Table 2 Waste type)  Waste types permitted for disposal	nfrastructure as required by your licen setructure as required by your licen relevant nuisance controls in place in anagement system in place for you ge register on site?  COMPLETED BY LANDFILL SI e and tonnage-landfill only  Authorised/licenced annual intake for disposal (tpa)  formation-Landfill only	cence and approved by the Agency  real and approved by the Agency  real and approved by the Agency  respectively.  Actual intake for disposal in reporting year (tpa)	Remaining licensed capacity at end of reporting year (m3)	st waste processing infrast vaste storage infrastructu	tructure required onsite re required on site	SELECT SELECT SELECT SELECT SELECT SELECT SELECT SELECT	Licence nermits	Is there a separate cell	Accepted asbestos in reporting		Lined disposal area occupied by	Unlined area
s all waste processing in all waste storage infra- toes your facility have r to you have an odour n to you maintain a sludg SECTION D-TO BE (Cable 2 Waste types Waste types permitted for disposal	nfrastructure as required by your licensestructure and the second section of the second section of the section of the second section of the sec	icence and approved by the Agency ce and approved by the Agency cur facility? If no why?  ITES ONLY  Actual intake for disposal in	ncy in place? If no please list vin place? If	st waste processing infras	tructure required onsite	SELECT SELECT SELECT SELECT SELECT SELECT	Licence permits asbestos	Is there a separate cell for asbestos?	Accepted asbestos in reporting year	Total disposal area occupied by waste		Unlined area

WASTE SUMMARY	Lic No:	P0224-02	Year	2012	

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

	Table 1 Environmental montering fantam on canada montering standards							
Was meterological								
monitoring in						Was	Has the statement	
compliance with						topography of	under S53(A)(5) of	
Landfill Directive (LD)	Was leachate monitored in	Was Landfill Gas monitored in	Was SW monitored in			the site	WMA been	
standard in reporting	compliance with LD standard in	compliance with LD standard in	compliance with LD	Have GW trigger levels	Were emission limit values agreed with	surveyed in	submitted in	
year +	reporting year	reporting year	standard in reporting year	been established	the Agency (ELVs)	reporting year	reporting year	Comments

<sup>+</sup> please refer to Landfill Manual linked above for relevant Landfill Directive monitoring standards

Table 5 Capping-Landfill only

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

<sup>\*</sup>please note this includes daily cover area

#### Table 6 Leachate-Landfill only

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

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

SELECT	
SELECT	

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

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

Table 7 Landfill Gas-Landfill only

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



| PRTR# : P0224 | Facility Name : Analog Devices B.V | Filename : P0224\_2012AnalogDevices.xls | Return Year : 2012 |

6/4/2013 9:54

## Guidance to completing the PRTR workbook

# **AER Returns Workbook**

REFERENCE YEAR 2012

1. FACILITY IDENTIFICATION					
Parent Company Name	Analog Devices B.V				
Facility Name	Analog Devices B.V				
PRTR Identification Number	P0224				
Licence Number	P0224-02				

Waste or IPPC Classes of Activity

No	. class_name
13.2	The manufacture of integrated circuits and printed circuit boards.

Address 1	Raheen Business Park
Address 2	Raheen
Address 3	Co. Limerick
Address 4	
	Limerick
Country	Ireland
Coordinates of Location	-8.65827 52.6266
River Basin District	IEGBNISH
NACE Code	2611
Main Economic Activity	Manufacture of electronic components
AER Returns Contact Name	Fiona O'Mahony
AER Returns Contact Email Address	fiona.omahony@analog.com
AER Returns Contact Position	Snr EHS Engineer
AER Returns Contact Telephone Number	061 495867
AER Returns Contact Mobile Phone Number	087 6525948
AER Returns Contact Fax Number	061 301258
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	1100
User Feedback/Comments	
Web Address	

## 2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
50.1	General

#### 3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)

3. 30LVENTS REGULATIONS (3.1. No. 343 01 20	02)
Is it applicable?	No
Have you been granted an exemption?	
If applicable which activity class applies (as per	
Schedule 2 of the regulations)?	
Is the reduction scheme compliance route being	
used?	

4. WASTE IMPORTED/ACCEPTED ONTO SITE	Guidance on waste imported/accepted onto site
Do you import/accept waste onto your site for on-	
site treatment (either recovery or disposal	
activities)?	No

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# : P0224 | Facility Name : Analog Devices B.V | Filename : P0224 | 2012AnalogDevices.xls | Return Year : 2012 |

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#### SECTION A: SECTOR SPECIFIC PRTR POLLUTANTS

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

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

#### SECTION B: REMAINING PRTR POLLUTANTS

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

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

#### SECTION C - PEMAINING POLITITANT EMISSIONS (As required in your Licence)

	SECTION C : REMAINING POLLUTANT EMIS	TION C : REMAINING POLLUTANT EMISSIONS (As required in your Licence)								
	RELEASES TO AIR				Please enter all quantities in this section in KGs					
	POLLUTANT			ME	THOD	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	
2	214	Hydrogen bromide	M	OTH	US EPA M26A	10.03	10.03	0.0	0.0	
2	210	Dust	M	ALT	EN 13284-1	73.552	73.552	0.0	0.0	
2	228	TA Luft inorganic dust particles class 2	M	EN 14385:2004		3.602	3.602	0.0	0.0	
2	229	TA Luft inorganic dust particles class 3	M	EN 14385:2004		8.787	8.787	0.0	0.0	
2	235	Total acids	M	EN 1911-1 to 3:200	13	763.38	763.38	0.0	0.0	
2	230	TA Luft organic substances class 1	M	EN 13649:2001		21.44	21.44	0.0	0.0	
		TA Luft organic substances class 2	M	EN 13649:2001		36.29	36.29	0.0	0.0	
2	232	TA Luft organic substances class 3	M	EN 13649:2001		427.93	427.93	0.0	0.0	
		* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button								

For the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide summary data on landfill gas (Methanol faired or utilised on their facilities to accompany the figures for total methane generated. Operators should only report their Net methane (CH4) emission to the environment under Total (NGV) or Section A. Sector specific PNTP politicans above. Please complete the table below:

#### andfill:

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

## **SECTION A: SECTOR SPECIFIC PRTR POLLUTANTS**

	RELEASES TO WATERS				
POLLUTANT					
No. Annex II	Name				

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

### **SECTION B: REMAINING PRTR POLLUTANTS**

SECTION B. REMAINING FRIR FOLLOTANTS					
	RELEASES TO WATERS				
POLLUTANT					
No. Annex II	Name				

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

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

	RELEASES TO WATERS				
POLLUTANT					
Pollutant No.	Name				

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

Data on ambient monitoring of storm/surface water or groundwater, conducted as part of your licence requirements, should NC

	Please enter all quantities in this section in KGs					
		Method Used				
M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year		
			0.0	)	0.0	

) then click the delete button

			Please enter all quantities	in this section in K	Gs
		Method Used			
M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	
			0.0		0.0

) then click the delete button

			Please enter all quantities	in this section in K	(Gs
		Method Used			
M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	
			0.0		0.0

) then click the delete button

<u>OT be submitted under AER / PRTR Reporting as this only concerns Releases from your facility</u>

QUANTITY	
A (Accidental) KG/Year	F (Fugitive) KG/Year
0.0	0.0

OHANITITY (	
QUANTITY	
A (Accidental) KG/Year	F (Fugitive) KG/Year
0.0	0.0

QUANTITY	
A (Accidental) KG/Year	F (Fugitive) KG/Year
0.0	0.0

#### 4.3 RELEASES TO WASTEWATER OR SEWER

Link to previous years emissions data

| PRTR# : P0224 | Facility Name : Analog Devices B.V | Filename : P0224\_2012AnalogDevices.xls | R

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#### SECTION A : PRTR POLLUTANTS

OLOTION A.T KIKT OLLOTANIO									
Of	FSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREAT	TMENT OR SEWER			Please enter all quantities in this section in KGs				
		ME	THOD	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	
17	Arsenic and compounds (as As)	M	OTH	ICPMS	0.0000829	0.0000829	0.0	0.0	
79	Chlorides (as CI)	M	OTH	Colorimetry	159942.0	159942.0	0.0	0.0	
83	Fluorides (as total F)	M	OTH	Colorimetry	2428.54	2428.54	0.0	0.0	
23	Lead and compounds (as Pb)	M	OTH	ICPMS	0.00099	0.00099	0.0	0.0	
13	Total phosphorus	M	OTH	Digestion and colorimetry	290.0	290.0	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)

SECTION B : REM.	AINING POLLUTANT EMISSIONS (as required in your Licence)									
	OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREAT	MENT OR	SEWER		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		
238	Ammonia (as N)	M	OTH	Colorimetry	2495.81	2495.81	0.0	0.0		
306	COD	M	OTH	Colorimetry	3103.48	3103.48	0.0	0.0		
				solvent						
314	Fats, Oils and Greases	M	OTH	extraction/gravimetry	0.958	0.958	0.0	0.0		
341	Sodium	M	OTH	ICPMS	123318.9	123318.9	0.0	0.0		
343	Sulphate	M	OTH	Colorimetry	69218.17	69218.17	0.0	0.0		
				Filtration and drying at 104						
240			OTH	degrees celcius	4512.39	4512.39	0.0	0.0		
347	Total heavy metals	M	OTH	ICPMS	3.9	3.9	0.0	0.0		
358	Tin	M	OTH	ICPMS	0.55	0.55	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

## **4.4 RELEASES TO LAND**

Link to previous years emissions data

## **SECTION A: PRTR POLLUTANTS**

	RELEASES TO LAND
P	DLLUTANT
No. Annex II	Name

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

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

SECTION B. KEMAINING FO	DELOTANT EMISSIONS (as required in your Electice)
	RELEASES TO LAND
	POLLUTANT
Pollutant No.	Name

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

			Please enter all quantities
	ME	THOD	
		Method Used	
M/C/E	Method Code	Designation or Description	Emission Point 1
			0.0

) then click the delete button

			Please enter all quantities
	ME	THOD	
		Method Used	
M/C/E	Method Code	Designation or Description	Emission Point 1
			0.0

<sup>)</sup> then click the delete button

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٠	in this section in KGs	
		QUANTITY
	T (Total) KG/Year	A (Accidental) KG/Year
,	0.0	0.0

in this section in KGs	
	QUANTITY
T (Total) KG/Year	A (Accidental) KG/Year
0.0	0.0

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE | PRTR#: P0224 | Facility Name: Analog Devices B.V | Filename: P0224\_2012Analog Devices x/s | Return Year: 2012 | 6/4/2013 9:54

				Please enter	all quantities on this sheet in Tonnes			-9					0
				Quantity (Tonnes per Year)		Waste		Method Used		Haz Waste: Name and Licence/Permit No of Next Destination Facility 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)
l	Transfer Destination	European Waste Code	Hazardous		Description of Waste	Treatment Operation	M/C/E	Method Used	Location of Treatment			RWE SAVA GmbH.A 51 G	
	To Other Countries	06 01 06	Yes	1.341	other acids	D10	М	Weighed	Abroad	Veolia Environmental Services,W0050-02	Corrin,Fermoy,Co. Cork, ,Ireland	00 508,Osterweute 1 ,Brunsbuttel ,,Germany RWE SAVA GmbH,A 51 G	Osterweute 1 ,Brunsbuttel ,,Germany
	To Other Countries	06 02 05	Yes	0.903	other bases	D10	М	Weighed	Abroad	Veolia Environmental Services,W0050-02	Corrin,Fermoy,Co. Cork, ,Ireland	00 508,Osterweute 1 ,Brunsbuttel ,,,,,Germany Veolia Environmental Services,W0050-	Osterweute 1 ,Brunsbuttel ,,,,,Germany
	Within the Country	07 01 01	Yes	2.094	aqueous washing liquids and mother liquors	D10	М	Weighed	Offsite in Ireland	Veolia Environmental Services,W0050-02	Corrin,Fermoy,Co. Cork, ,Ireland		Corrin,Fermoy,Co. Cork, ,Ireland
	Within the Country	07 01 04	Yes	120.88	other organic solvents, washing liquids and mother liquors	D13	М	Weighed	Offsite in Ireland	Veolia Environmental Services,W0050-02	Corrin,Fermoy,Co. Cork, ,Ireland	02,Corrin,Fermoy,Co. Cork, ,Ireland Veolia Environmental Services,W0050-	Corrin,Fermoy,Co. Cork, ,Ireland
	Within the Country	07 01 04	Yes	43.41	other organic solvents, washing liquids and mother liquors waste ceramics, bricks, tiles and	R2	М	Weighed	Offsite in Ireland	Veolia Environmental Services,W0050-02	Corrin,Fermoy,Co. Cork, ,Ireland	02,Corrin,Fermoy,Co. Cork, ,Ireland	Corrin,Fermoy,Co. Cork, ,Ireland
	To Other Countries	10 12 08	No	0.573	construction products (after thermal processing) eluate and sludges from membrane	D1	М	Weighed	Abroad	Veolia Environmental Services,W0050-02	Corrin,Fermoy,Co. Cork, ,Ireland	RWE SAVA GmbH,A 51 G	
	To Other Countries	11 01 15	Yes	1.584	systems or ion exchange systems containing dangerous substances	R13	М	Weighed	Abroad	Veolia Environmental Services,W0050-02	Corrin,Fermoy,Co. Cork, ,Ireland	00 508,Osterweute 1 ,Brunsbuttel ,,,,,Germany Veolia Environmental Services,W0050-	Osterweute 1 ,Brunsbuttel ,,Germany
	Within the Country	15 01 10	Yes	14.368	packaging containing residues of or contaminated by dangerous substances	D10	М	Weighed	Offsite in Ireland	Veolia Environmental Services,W0050-02	Corrin,Fermoy,Co. Cork, ,Ireland	02,Corrin,Fermoy,Co. Cork, ,Ireland Veolia Ellesmere Port,AG 8225,Bridges	Corrin,Fermoy,Co. Cork, ,Ireland
	To Other Countries	15 01 10	Yes	0.294	packaging containing residues of or contaminated by dangerous substances	D10	М	Weighed	Abroad	Veolia Environmental Services,W0050-02	Corrin,Fermoy,Co. Cork, ,Ireland	Road,Ellesmere Port,Wirral Cheshire,.,United Kingdom RWE SAVA GmbH,A 51 G	Port,Wirral Cheshire,.,United Kingdom
	To Other Countries	15 01 10	Yes	2.1	absorbents, filter materials (including oil filters not otherwise specified), wiping	D10	М	Weighed	Abroad	Veolia Environmental Services,W0050-02	Corrin,Fermoy,Co. Cork, ,Ireland	00 508,Osterweute 1 ,Brunsbuttel ,,Germany Veolia Ellesmere Port,AG 8225,Bridges	Osterweute 1 ,Brunsbuttel ,,Germany Bridges Road,Ellesmere
	To Other Countries	15 02 02	Yes	4.565	cloths, protective clothing contaminated by dangerous substances	D10	M	Weighed	Abroad	Veolia Environmental Services,W0050-02	Corrin,Fermoy,Co. Cork, ,Ireland	Road,Ellesmere Port,Wirral Cheshire,.,United Kingdom KMK,W0113-03,Cappincur	Port,Wirral Cheshire,.,United Kingdom Cappincur Industrial
	Within the Country	16 02 13	Yes	3.095	discarded equipment containing hazardous components (16) other than those mentioned in 16 02 09 to 16 02 12	R4	М	Weighed	Offsite in Ireland	KMK Metals,W0113-03	Cappincur Ind Est, Daingean Rd, Tullamore , Co Offaly, Ireland	Road,Tullamore,Co. Offaly,Ireland KMK,W0113-03,Cappincur	Estate, Daingean Road, Tullamore, Co. Offaly, Ireland Cappincur Industrial
	Within the Country	16 06 01	Yes	0.176	lead batteries	R4	М	Weighed	Offsite in Ireland	KMK Metals,W0113-03	Cappincur Ind Est, Daingean Rd, Tullamore , Co Offaly, Ireland	Road,Tullamore,Co. Offaly,Ireland KMK,W0113-03,Cappincur	Estate, Daingean Road, Tullamore, Co. Offaly, Ireland Cappincur Industrial
	Within the Country	16 06 02	Yes	0.037	Ni-Cd batteries linings and refractories from non-	R4	М	Weighed	Offsite in Ireland	KMK Metals,W0113-03	Cappincur Ind Est, Daingean Rd, Tullamore , Co Offaly, Ireland	Road,Tullamore,Co. Offaly,Ireland RWE SAVA GmbH,A 51 G	Estate,Daingean Road,Tullamore,Co. Offaly,Ireland
	To Other Countries	16 11 05	Yes	0.398	metallurgical processes containing dangerous substances	D10	М	Weighed	Abroad	Veolia Environmental Services,W0050-02	Corrin,Fermoy,Co. Cork, ,Ireland	00 508,Osterweute 1 ,Brunsbuttel ,,,,,Germany Ballynagran Landfill,0165-	Osterweute 1 ,Brunsbuttel ,,,,,Germany
	Within the Country	18 01 03	Yes	0.111	wastes whose collection and disposal is subject to special requirements in order to prevent infection	D15	М	Weighed	Offsite in Ireland	Eco Safe Systems,EPA 54-2	Unit 1A Allied Ind. Est,Kylemore Rd,Dublin 10,.,Ireland	02,Ballynagran Landfill,Ballynagran ,Co. Wicklow,.,Ireland Sita Ecoservice,EMT/2008/2694, Bedrijvenpark Twente,243	Ballynagran Landfill,Ballynagran ,Co. Wicklow,.,Ireland
	To Other Countries	20 01 14	Yes	153.15	acids	D9	M	Weighed	Abroad	Veolia Environmental Services,W0050-02	Corrin,Fermoy,Co. Cork, ,Ireland	7602 AH Almelo,,Netherlands	7602 AH Almelo,,Netherlands

									Han Waste - Name and			
									Haz Waste : Name and Licence/Permit No of Next			
			Quantity						Destination Facility Non Haz Waste: Name and	Haz Waste : Address of Next Destination Facility	Name and License / Permit No. and Address of Final Recoverer /	Actual Address of Final Destination
			(Tonnes per Year)				Method Used		Licence/Permit No of Recover/Disposer	Non Haz Waste: Address of Recover/Disposer	Disposer (HAZARDOUS WASTE ONLY)	i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
	Furancan Wasts				Waste			Location of				
Transfer Destination	European Waste Code	Hazardous		Description of Waste	Treatment Operation	M/C/E	Method Used	Location of Treatment				
				<u> </u>		•					Irish lamp	
										Woodstock Industrial	Recycling,02/2000B,Woodst ock Industrial	Woodstock Industrial
										Estate, Kilkenny	Estate,Kilkenny	Estate, Kilkenny
Within the Country	20 01 21	Yes	0.919	fluorescent tubes and other mercury- containing waste	R4	М	Weighed	Offsite in Ireland	Irish Lamp Recycling,02/2000B	road,Athy,Co. Kildare,Ireland	road,Athy,Co. Kildare.Ireland	road,Athy,Co. Kildare,Ireland
,									,		Veolia Environmental	
									Veoila Environmental	Corrin ,Fermoy ,Co.	Services, W0050- 02, Corrin, Fermoy, Co. Cork,	Corrin, Fermoy, Co. Cork,
Within the Country	06 02 04	Yes	0.195		D13	M	Weighed	Offsite in Ireland	services,W0050-02	Cork,.,Ireland	,Ireland	,Ireland
To Other Countries	20 01 27	Yes	0.051	paint, inks, adhesives and resins containing dangerous substances	R1	М	Weighed	Abroad	Veolia Environmental Services,W0050-02	Corrin,Fermoy,Co. Cork, .Ireland	ATM ,.,Vlasweg 12,Moerdijk,.,,Netherlands	Vlasweg 12,Moerdijk,,Netherlands
				g						,	Veolia Environmental	,
				discarded inorganic chemicals consisting of					Veolia Environmental	Corrin,Fermoy,Co. Cork,	Services, W0050- 02, Corrin, Fermoy, Co. Cork,	Corrin, Fermoy, Co. Cork,
Within the Country	16 05 07	Yes	0.063		D10	M	Weighed	Offsite in Ireland	Services,W0050-02	,Ireland	,Ireland	,Ireland
										Cappincur Ind Est, Daingean	KMK,W0113-03,Cappincur Industrial Estate.Daingean	Cappincur Industrial Estate, Daingean
				discarded equipment containing						Rd,Tullamore ,Co	Road,Tullamore,Co.	Road, Tullamore, Co.
Within the Country	16 02 11	Yes	0.025	chlorofluorocarbons, HCFC, HFC	R4	M	Weighed	Offsite in Ireland	KMK Metals,W0113-03	Offaly,Ireland	Offaly, Ireland	Offaly, Ireland
				mixed construction and demolition wastes								
Within the Country	17 09 04	No	44.68	other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	D1	М	Weighed	Offsite in Ireland	Mr Binman,W0061-2	Luddenmore, Grange, Kilmall ock, Co. Limerick, Ireland		
				mixture of concrete, bricks, tiles and			3					
Within the Country	17 01 07	No	58.88	ceramics other than those mentioned in 17 01 06	D1	M	Weighed	Offsite in Ireland	Mr Binman,W0061-2	Luddenmore, Grange, Kilmall ock, Co. Limerick, Ireland		
							-			Luddenmore, Grange, Kilmall		
Within the Country	15 01 01	No	28.6	paper and cardboard packaging	R5	M	Weighed	Offsite in Ireland	Mr Binman,W0061-2	ock,Co. Limerick,Ireland Luddenmore,Grange,Kilmall		
Within the Country	17 02 01	No	16.28	wood	R5	M	Weighed	Offsite in Ireland	Mr Binman,W0061-2	ock,Co. Limerick,Ireland	Veolia Ellesmere Port,AG	
											8225,Bridges	Bridges Road, Ellesmere
To Other Countries	07.01.04	Yes	0.033	other organic solvents, washing liquids and mother liquors	R2	M	Weighed	Abroad	Veolia Environmental Services,W0050-02	Corrin,Fermoy,Co. Cork, ,Ireland	Road, Ellesmere Port, Wirral Cheshire,, United Kingdom	Port,Wirral Cheshire,.,United Kingdom
To Other Countries	07 01 04	165	0.933	mother liquors	11/2	IVI	Weighed	Abioad			RWE SAVA GmbH,A 51 G	· ·
To Other Countries	20.01.14	Yes	0.3	acids	D10	М	Weighed	Abroad	Veolia Environmental Services.W0050-02	Corrin,Fermoy,Co. Cork, ,Ireland	00 508,Osterweute 1 ,Brunsbuttel ,,Germany	Osterweute 1 ,Brunsbuttel ,,Germany
		165							Veolia Environmental	Corrin,Fermoy,Co. Cork,	,Drunsbutter ,.,.,Germany	,.,.,Germany
Within the Country	20 01 25	No	2.61	edible oil and fat	D13	M	Weighed	Offsite in Ireland	Services,W0050-02	,Ireland	RWE SAVA GmbH,A 51 G	
									Veolia Environmental	Corrin,Fermoy,Co. Cork,	00 508,Osterweute 1	Osterweute 1 ,Brunsbuttel
To Other Countries	06 01 02	Yes	0.164	hydrochloric acid	D10	M	Weighed	Abroad	Services,W0050-02	,Ireland	,Brunsbuttel ,,,,,Germany Veolia Environmental	,,,,Germany
											Services,W0050-	
Within the Country	13 02 08	Yes	0.36	other engine, gear and lubricating oils	D13	М	Weighed	Offsite in Ireland	Veoila Environmental Services,W0050-02	Corrin ,Fermoy ,Co. Cork ,n/a,Ireland	02,Corrin,Fermoy,Co. Cork, Ireland	Corrin, Fermoy, Co. Cork, Ireland
*				5 . 5			· ·		Clean Ireland	Cree,Kilrush,Co	, ii oidiid	, ii olaria
Within the Country	20 03 01	No	14.134	mixed municipal waste	D1	M	Weighed	Offsite in Ireland	Recycling,002/07/WPT/CL Clean Ireland	Clare,.,Ireland Cree,Kilrush,Co		
Within the Country	15 01 01	No	40.654	paper and cardboard packaging	R5	M	Weighed	Offsite in Ireland	Recycling,002/07/WPT/CL	Clare,.,Ireland		
Within the Country	15 01 02	No	2.732	plastic packaging	R5	M	Weighed	Offsite in Ireland	Clean Ireland Recycling,002/07/WPT/CL	Cree,Kilrush,Co Clare,Ireland		
							-		Clean Ireland	Cree,Kilrush,Co		
Within the Country	15 01 07	No	0.11	glass packaging mixed construction and demolition wastes	R5	M	Weighed	Offisite in Ireland	Recycling,002/07/WPT/CL	Clare,.,Ireland		
Mithin the Country	17.00.04	No	20.44	other than those mentioned in 17 09 01, 17	D2	M	Moighod	Officito in Iroland	Clean Ireland	Cree,Kilrush,Co		
Within the Country	17 09 04	No	28.44	09 02 and 17 09 03	R3	M	Weighed	Offsite in Ireland	Recycling,002/07/WPT/CL Clean Ireland	Clare,.,Ireland Cree,Kilrush,Co		
Within the Country	20 01 02	No	1.63	glass	R5	M	Weighed	Offsite in Ireland	Recycling,002/07/WPT/CL Clean Ireland	Clare,.,Ireland Cree,Kilrush,Co		
Within the Country	20 01 38	No	20.715	wood other than that mentioned in 20 01 37	R5	M	Weighed	Offsite in Ireland	Recycling,002/07/WPT/CL	Clare,.,Ireland		
Within the Country	20.01.39	No	A 175	plastics	R5	М	Weighed	Offsite in Ireland	Clean Ireland Recycling,002/07/WPT/CL	Cree,Kilrush,Co Clare,Ireland		
THAIRI THE COUNTRY	20 01 00	140	4.170	pidotioo	110	141	TTOIGHEU	Challe in helallu	recogning,002/07/441* I/OL	Olaro,,,ii cianu		

ſ										Haz Waste : Name and			
										Licence/Permit No of Next Destination Facility Non	Haz Waste : Address of Next	Name and License / Permit No. and	
				Quantity (Tonnes per						Haz Waste: Name and	Destination Facility	Address of Final Recoverer /	Actual Address of Final Destination
				Year)				Method Used		Licence/Permit No of Recover/Disposer	Non Haz Waste: Address of Recover/Disposer	Disposer (HAZARDOUS WASTE ONLY)	i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
		F 1M4-				Waste							
1.	ransfer Destination	European Waste Code	Hazardous		Description of Waste	Treatment Operation	M/C/E	Method Used	Location of Treatment				
	Tarister Destination	Outc	i iuzui uous		Description of Waste	Operation	IVI/O/L	Wictilod Osca	ricamient	Clean Ireland	Cree,Kilrush,Co		
١	Vithin the Country	20 01 40	No	11.69	metals	R4	M	Weighed	Offsite in Ireland	Recycling,002/07/WPT/CL	Clare,.,Ireland		
١	Vithin the Country	20 01 08	No	7 931	biodegradable kitchen and canteen waste	R3	М	Weighed	Offsite in Ireland	Clean Ireland Recycling,002/07/WPT/CL	Cree,Kilrush,Co Clare,,Ireland		
ľ	Tham are country	20 0 . 00		7.001	prodogradable interior and carried in made			Troignou	Choice in include	Troopoung, oo 2 o TTTT TO 2	Cappincur Ind Est, Daingean		
,	White the Occuptor	10.00.01	NI-	0.440	allialias hattarias (susset 40 00 00)	DE		Material	Official to book and	KMK M-1-1- WO440 00	Rd,Tullamore ,Co		
'	Vithin the Country	16 06 04	No	0.143	alkaline batteries (except 16 06 03)	R5	М	Weighed	Offsite in Ireland	KMK Metals,W0113-03	Offaly,Ireland		
											Ballykeefe Townland Waste		
					and and according to the state of the state	5.			0""	Greenstar Environmental	ManagementSection,Dock		
'	Vithin the Country	20 03 01	No	3.56	mixed municipal waste	R4	М	Weighed	Offsite in Ireland	Services Limited,W0082-01	Road ,Limerick,.,Ireland Cappincur Ind Est,Daingean		
					discarded equipment other than those						Rd,Tullamore ,Co		
١	Vithin the Country	16 02 14	No		mentioned in 16 02 09 to 16 02 13	R4	M	Weighed	Offsite in Ireland	KMK Metals,W0113-03	Offaly, Ireland		
					components removed from discarded equipment other than those mentioned in						Cappincur Ind Est, Daingean Rd, Tullamore, Co		
١	Vithin the Country	16 02 16	No		16 02 15	R4	M	Weighed	Offsite in Ireland	KMK Metals,W0113-03	Offaly, Ireland		
											Clonminham Industrial Estate.Portlaoise.Co.	ATM Manuar	\
١	Vithin the Country	13 08 99	Yes	1.68	wastes not otherwise specified	R13	М	Weighed	Offsite in Ireland	Enva Ireland Ltd.,41-1		ATM ,.,Vlasweg 12,Moerdijk,,,,Netherlands	Vlasweg 12,Moerdijk,,Netherlands
ľ	Tham are country			1.00	Mades Not care mos opcomed			Troignou	Choice in include	Enva indiana Eta., 11	Clonminham Industrial	12,moorajit,,,,rtouronando	12,11001011,1,1,1100101101101
			.,						0""				Vlasweg
1	Vithin the Country	13 08 99	Yes		wastes not otherwise specified soil and stones other than those mentioned	R9	М	Weighed	Offsite in Ireland	Enva Ireland Ltd.,41-1 Fergal O'Grady,COR LK	Laois,.,Ireland Newtown,Clarina,.,Co	12,Moerdijk,.,,,Netherlands	12,Moerdijk,,,,,Netherlands
١	Vithin the Country	17 05 04	No			D1	M	Weighed	Onsite of generati		Limerick, Ireland		
					mirrord approximation and demolition resolution						Dellukoofe Toursland Wests		
					mixed construction and demolition wastes other than those mentioned in 17 09 01, 17					Greenstar Environmental	Ballykeefe Townland Waste Management Section, Dock		
١	Vithin the Country	17 09 04	No			D1	M	Weighed	Offsite in Ireland	Services Limited,W0082-01	Road ,Limerick,.,Ireland		
										United Metals Recycling	Eastway Business		
١	Vithin the Country	17 04 07	No	26.68	mixed metals	R4	М	Weighed	Offsite in Ireland	(Ireland) Ltd,LK 2011 147 R1	Park,Ballysimon,Co Limerick,.,Ireland		
	,									United Metals Recycling	Eastway Business		
,	With the Alexander	47.04.00	NI-	40.00	at contains	R4	М	Material	Official to body and	(Ireland) Ltd,LK 2011 147 R1	Park,Ballysimon,Co		
'	Vithin the Country	17 04 02	No	13.26	aluminium	K4	IVI	Weighed	Onone in noiding	Atlantic Cabins and	Limerick,.,Ireland Mount Mungret		
										Containers Ltd,WCP-LK-10-	,Mungret,.,Co		
١	Vithin the Country	20 03 06	No	0.185	waste from sewage cleaning	D8	M	Weighed	Offsite in Ireland	660-01	Limerick, Ireland		
											Ballykeefe Townland Waste		
										Greenstar Environmental	Management Section, Dock		
١	Vithin the Country	17 02 01	No	3.32	wood	R5	M	Weighed	Offsite in Ireland	Services Limited, W0082-01 United Metals Recycling	Road ,Limerick,.,Ireland Eastway Business		
										(Ireland) Ltd,LK 2011 147	Park,Ballysimon,Co		
١	Vithin the Country	17 04 05	No	211.0	iron and steel	R4	M	Weighed	Offsite in Ireland		Limerick,.,Ireland		
,	Vithin the Country	15.01.03	No	13 51	wooden packaging	R5	М	Weighed	Offeite in Ireland	Thomas O'Neill,WFP/LK/2012/05B	Dereen,Castleconnell,.,Co Limerick,Ireland		
ľ	viaini die country	10 01 00	140	10.01	wooden puckaging	110		Weighted	Onsite in ireland	O Neill, WITT /ETGEG 12/00B	Emerick, meland		
											Ballykeefe Townland Waste		
١	Vithin the Country	19 12 07	No	10 18	wood other than that mentioned in 19 12 06	R5	М	Weighed	Offsite in Ireland	Greenstar Environmental Services Limited, W0082-01	ManagementSection,Dock Road ,Limerick,.,Ireland		
	,											Rilta Environmental	
												Ltd,W0165-02,Greenogue	Crannania Business
					construction materials containing asbestos					Rilta Environmental		Business park,Rathcoole,Co.	Greenogue Business park,Rathcoole,Co.
١	Vithin the Country	17 06 05	Yes	2.88		D1	M	Weighed	Offsite in Ireland	Ltd,W0192-03	Dublin,Ireland	Dublin,.,Ireland	Dublin,.,Ireland
,	Vithin the Country	20.02.01	No	00.00	mixed municipal weets	R1	М	Weighod	Offoito in Iralas d	Clean Ireland Recycling,002/07/WPT/CL	Cree,Kilrush,Co Clare,,Ireland		
	Vithin the Country	20 03 01	No	02.09	mixed municipal waste	KI	М	Weighed	Offsite in Ireland	Clean Ireland	Cree,Kilrush,Co		
١	Vithin the Country	20 03 01	No	8.44	mixed municipal waste	R3	M	Weighed	Offsite in Ireland	Recycling,002/07/WPT/CL	Clare,.,Ireland		
					discarded inorganic chemicals consisting of					Veoila Environmental		RWE SAVA GmbH,A 51 G 00 508,Osterweute 1	Osterweute 1 ,Brunsbuttel
١	Vithin the Country	16 05 07	Yes			D10	М	Weighed		Services,W0050-02			,,,,Germany

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation		Method Used  Method Used	Location of Treatment	Haz Waste: Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste: Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination
Within the Country	20.01.14	Yes	0.3 acids		D10	M	Weighed		Veoila Environmental Services.W0050-02	Corrin ,Fermoy ,Co. Cork	RWE SAVA GmbH,A 51 G 00 508,Osterweute 1 .BrunsbuttelGermany	Osterweute 1 ,Brunsbuttel ,Germany

<sup>\*</sup> 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