

Reporting of Emission to Groundwater for the period from ...1st January 2015..to...30th June 2015...

Operator : RWE Generation UK plc Form: Groundwater¹

Location: Aberthaw Ash Disposal Site

Permit/Variation Number: DP3432SW

Emission point	Substance/ Parameter	Emission Limit Value	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Accreditation/ Certification ⁽⁴⁾	Uncertainty ⁽⁵⁾
BH3	Aluminium, Dissolved		<40 µg/l		17/02/2015	Sampling Amec/Testing EA NLS	
BH3	Antimony, Dissolved		14.4 µg/l		17/02/2015		
BH3	Arsenic Dissolved	310	194 µg/l		17/02/2015		
BH3	Boron, Dissolved	60000	24400 µg/l		17/02/2015		
BH3	Cadmium, Dissolved	15	0.092 µg/l		17/02/2015		
BH3	Calcium, Dissolved		419 mg/l		17/02/2015		
BH3	Chromium, Dissolved		<0.5 µg/l		17/02/2015		
BH3	Copper, Dissolved		<0.2 µg/l		17/02/2015		
BH3	Magnesium, Dissolved		212 mg/l		17/02/2015		
BH3	Manganese, Dissolved		280 µg/l		17/02/2015		
BH3	Molybdenum, Dissolved	9000	2700 µg/l		17/02/2015		
BH3	Nickel, Dissolved		0.363 µg/l		17/02/2015		
BH3	Selenium Dissolved	350	16.5 µg/l		17/02/2015		
BH3	Vanadium, Dissolved		40.4 µg/l		17/02/2015		
BH3	Mercury, Dissolved	20	<0.01 µg/l		17/02/2015		
BH3	Alkalinity to pH 4.5 as CaCO ₃		195 mg/l		17/02/2015		
BH3	Conductivity at 20C		0.066 uS/cm		17/02/2015		
BH3	Potassium, Dissolved		109 mg/l		17/02/2015		
BH3	Sodium, Dissolved		832 mg/l		17/02/2015		
BH3	Sulphate, Dissolved as SO ₄		1700 mg/l		17/02/2015		
BH3	Nitrogen : Total Oxidised as N		0.45 mg/l		17/02/2015		
BH3	Chloride		1260 mg/l		17/02/2015		
BH3	Fluoride		0.066 mg/l		17/02/2015		
BH3	Ammoniacal Nitrogen as N	6.6	0.825 mg/l		17/02/2015		
BH3	Carbon, Organic : Total as C :- (TOC)		<1 mg/l		17/02/2015		
BH3	pH		7.87 pH Units		17/02/2015		
BH3	Groundwater Level		6.38 mAOD		17/02/2015	Sampling Amec	

Emission point	Substance/ Parameter	Emission Limit Value	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Accreditation/ Certification ⁽⁴⁾	Uncertainty ⁽⁵⁾
BH3	Aluminium, Dissolved		<40 µg/l		18/05/2015	EA NLS	
BH3	Antimony, Dissolved		13.6 µg/l		18/05/2015		
BH3	Arsenic Dissolved	310	163 µg/l		18/05/2015		
BH3	Boron, Dissolved	60000	20500 µg/l		18/05/2015		
BH3	Cadmium, Dissolved	15	0.094 µg/l		18/05/2015		
BH3	Calcium, Dissolved		438 mg/l		18/05/2015		
BH3	Chromium, Dissolved		<0.5 µg/l		18/05/2015		
BH3	Copper, Dissolved		<0.2 µg/l		18/05/2015		
BH3	Magnesium, Dissolved		220 mg/l		18/05/2015		
BH3	Manganese, Dissolved		270 µg/l		18/05/2015		
BH3	Molybdenum, Dissolved	9000	1900 µg/l		18/05/2015		
BH3	Nickel, Dissolved		0.387 µg/l		18/05/2015		
BH3	Selenium Dissolved	350	13.3 µg/l		18/05/2015		
BH3	Vanadium, Dissolved		43.9 µg/l		18/05/2015		
BH3	Mercury, Dissolved	20	<0.01 µg/l		18/05/2015		
BH3	Alkalinity to pH 4.5 as CaCO3		214 mg/l		18/05/2015		
BH3	Conductivity at 20C		6690 uS/cm		18/05/2015		
BH3	Potassium, Dissolved		110 mg/l		18/05/2015		
BH3	Sodium, Dissolved		949 mg/l		18/05/2015		
BH3	Sulphate, Dissolved as SO4		1640 mg/l		18/05/2015		
BH3	Nitrogen : Total Oxidised as N		0.63 mg/l		18/05/2015		
BH3	Chloride		1460 mg/l		18/05/2015		
BH3	Fluoride		0.07 mg/l		18/05/2015		
BH3	Ammoniacal Nitrogen as N	6.6	0.35 mg/l		18/05/2015		
BH3	Carbon, Organic : Total as C :- {TOC}		<1 mg/l		18/05/2015		
BH3	pH		7.85 pH Units		18/05/2015		
BH3	Groundwater Level		4.32 mAOB		18/05/2015	Sampling Amec	

Emission point	Substance/ Parameter	Emission Limit Value	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Accreditation/ Certification ⁽⁴⁾	Uncertainty ⁽⁵⁾
BH5	Aluminium, Dissolved		<10 µg/l		17/02/2015	Sampling Amec/testing EA NLS	
BH5	Antimony, Dissolved		<1 µg/l		17/02/2015	-- --	
BH5	Arsenic Dissolved		<1 µg/l		17/02/2015	-- --	
BH5	Boron, Dissolved		450 µg/l		17/02/2015	-- --	
BH5	Cadmium, Dissolved		<0.1 µg/l		17/02/2015	-- --	
BH5	Calcium, Dissolved		240 mg/l		17/02/2015	-- --	
BH5	Chromium, Dissolved		<0.5 µg/l		17/02/2015	-- --	
BH5	Copper, Dissolved		1.48 µg/l		17/02/2015	-- --	
BH5	Magnesium, Dissolved		17.3 mg/l		17/02/2015	-- --	
BH5	Manganese, Dissolved		<10 µg/l		17/02/2015	-- --	
BH5	Molybdenum, Dissolved		<3 µg/l		17/02/2015	-- --	
BH5	Nickel, Dissolved		1.14 µg/l		17/02/2015	-- --	
BH5	Selenium Dissolved		<1 µg/l		17/02/2015	-- --	
BH5	Vanadium, Dissolved		<2 µg/l		17/02/2015	-- --	
BH5	Mercury, Dissolved		<0.01 µg/l		17/02/2015	-- --	
BH5	Alkalinity to pH 4.5 as CaCO3		360 mg/l		17/02/2015	-- --	
BH5	Conductivity at 20C		1270 uS/cm		17/02/2015	-- --	
BH5	Potassium, Dissolved		1.53 mg/l		17/02/2015	-- --	
BH5	Sodium, Dissolved		43.3 mg/l		17/02/2015	-- --	
BH5	Sulphate, Dissolved as SO4		295 mg/l		17/02/2015	-- --	
BH5	Nitrogen : Total Oxidised as N		1.15 mg/l		17/02/2015	-- --	
BH5	Chloride		68.6 mg/l		17/02/2015	-- --	
BH5	Fluoride		0.06 mg/l		17/02/2015	-- --	
BH5	Ammoniacal Nitrogen as N		0.03 mg/l		17/02/2015	-- --	
BH5	Carbon, Organic : Total as C :- {TOC}		2.1 mg/l		17/02/2015	-- --	
BH5	pH		7.09 pH Units		17/02/2015	-- --	
BH5	Groundwater Level		9.49 mAOB		17/02/2015	Sampling Amec	

Emission point	Substance/ Parameter	Emission Limit Value	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Accreditation/ Certification ⁽⁴⁾	Uncertainty ⁽⁵⁾
BH5	Aluminium, Dissolved		26.3 µg/l		18/05/2015	EA NLS	
BH5	Antimony, Dissolved		<1 µg/l		18/05/2015		
BH5	Arsenic Dissolved		<1 µg/l		18/05/2015		
BH5	Boron, Dissolved		616 µg/l		18/05/2015		
BH5	Cadmium, Dissolved		<0.1 µg/l		18/05/2015		
BH5	Calcium, Dissolved		228 mg/l		18/05/2015		
BH5	Chromium, Dissolved		<0.5 µg/l		18/05/2015		
BH5	Copper, Dissolved		1.92 µg/l		18/05/2015		
BH5	Magnesium, Dissolved		17.3 mg/l		18/05/2015		
BH5	Manganese, Dissolved		<50 µg/l		18/05/2015		
BH5	Molybdenum, Dissolved		<3 µg/l		18/05/2015		
BH5	Nickel, Dissolved		2.35 µg/l		18/05/2015		
BH5	Selenium Dissolved		<1 µg/l		18/05/2015		
BH5	Vanadium, Dissolved		<2 µg/l		18/05/2015		
BH5	Mercury, Dissolved		0.0379 µg/l		18/05/2015		
BH5	Alkalinity to pH 4.5 as CaCO3		360 mg/l		18/05/2015		
BH5	Conductivity at 20C		1170 uS/cm		18/05/2015		
BH5	Potassium, Dissolved		1.84 mg/l		18/05/2015		
BH5	Sodium, Dissolved		41.6 mg/l		18/05/2015		
BH5	Sulphate, Dissolved as SO4		297 mg/l		18/05/2015		
BH5	Nitrogen : Total Oxidised as N		0.44 mg/l		18/05/2015		
BH5	Chloride		51.4 mg/l		18/05/2015		
BH5	Fluoride		0.068 mg/l		18/05/2015		
BH5	Ammoniacal Nitrogen as N		0.03 mg/l		18/05/2015		
BH5	Carbon, Organic : Total as C :- {TOC}		<1 mg/l		18/05/2015		
BH5	pH		7.06 pH Units		18/05/2015		
BH5	Groundwater Level		9.71 mAO		18/05/2015	Sampling Amec	

Emission point	Substance/Parameter	Emission Limit Value	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Accreditation/ Certification ^[4]	Uncertainty ^[5]
BH6	Aluminium, Dissolved		<40 µg/l		17/02/2015	Sampling Amec/Testing EA NLS	
BH6	Antimony, Dissolved		<10 µg/l		17/02/2015		
BH6	Arsenic Dissolved		16.7 µg/l		17/02/2015		
BH6	Boron, Dissolved		28800 µg/l		17/02/2015		
BH6	Cadmium, Dissolved		0.268 µg/l		17/02/2015		
BH6	Calcium, Dissolved		873 mg/l		17/02/2015		
BH6	Chromium, Dissolved		<0.5 µg/l		17/02/2015		
BH6	Copper, Dissolved		0.341 µg/l		17/02/2015		
BH6	Magnesium, Dissolved		252 mg/l		17/02/2015		
BH6	Manganese, Dissolved		1580 µg/l		17/02/2015		
BH6	Molybdenum, Dissolved		4260 µg/l		17/02/2015		
BH6	Nickel, Dissolved		5.74 µg/l		17/02/2015		
BH6	Selenium Dissolved		12.6 µg/l		17/02/2015		
BH6	Vanadium, Dissolved		<20 µg/l		17/02/2015		
BH6	Mercury, Dissolved		<0.01 µg/l		17/02/2015		
BH6	Alkalinity to pH 4.5 as CaCO3		310 mg/l		17/02/2015		
BH6	Conductivity at 20C		11100 uS/cm		17/02/2015		
BH6	Potassium, Dissolved		126 mg/l		17/02/2015		
BH6	Sodium, Dissolved		1510 mg/l		17/02/2015		
BH6	Sulphate, Dissolved as SO4		2100 mg/l		17/02/2015		
BH6	Nitrogen : Total Oxidised as N		28.8 mg/l		17/02/2015		
BH6	Chloride		2970 mg/l		17/02/2015		
BH6	Fluoride		0.121 mg/l		17/02/2015		
BH6	Ammoniacal Nitrogen as N		0.2 mg/l		17/02/2015		
BH6	Carbon, Organic : Total as C :- {TOC}		1.5 mg/l		17/02/2015		
BH6	pH		7.47 pH Units		17/02/2015		
BH6	Groundwater Level		2.22 mAOD		17/02/2015	Sampling Amec	

Emission point	Substance/Parameter	Emission Limit Value	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Accreditation/ Certification ⁽⁴⁾	Uncertainty ⁽⁵⁾
BH6	Aluminium, Dissolved		<40 µg/l		18/05/2015	Sampling Amec/Testing EA NLS	
BH6	Antimony, Dissolved		<10 µg/l		18/05/2015		
BH6	Arsenic Dissolved		28.2 µg/l		18/05/2015		
BH6	Boron, Dissolved		27200 µg/l		18/05/2015		
BH6	Cadmium, Dissolved		0.141 µg/l		18/05/2015		
BH6	Calcium, Dissolved		959 mg/l		18/05/2015		
BH6	Chromium, Dissolved		<0.5 µg/l		18/05/2015		
BH6	Copper, Dissolved		<0.2 µg/l		18/05/2015		
BH6	Magnesium, Dissolved		307 mg/l		18/05/2015		
BH6	Manganese, Dissolved		1540 µg/l		18/05/2015		
BH6	Molybdenum, Dissolved		4330 µg/l		18/05/2015		
BH6	Nickel, Dissolved		5.54 µg/l		18/05/2015		
BH6	Selenium Dissolved		8.23 µg/l		18/05/2015		
BH6	Vanadium, Dissolved		<20 µg/l		18/05/2015		
BH6	Mercury, Dissolved		<0.01 µg/l		18/05/2015		
BH6	Alkalinity to pH 4.5 as CaCO ₃		300 mg/l		18/05/2015		
BH6	Conductivity at 20C		11900 uS/cm		18/05/2015		
BH6	Potassium, Dissolved		149 mg/l		18/05/2015		
BH6	Sodium, Dissolved		1740 mg/l		18/05/2015		
BH6	Sulphate, Dissolved as SO ₄		2380 mg/l		18/05/2015		
BH6	Nitrogen : Total Oxidised as N		37 mg/l		18/05/2015		
BH6	Chloride		3180 mg/l		18/05/2015		
BH6	Fluoride		0.14 mg/l		18/05/2015		
BH6	Ammoniacal Nitrogen as N		0.674 mg/l		18/05/2015		
BH6	Carbon, Organic : Total as C		3.4 mg/l		18/05/2015		
BH6	- : {TOC}						
BH6	pH		7.43 pH Units		18/05/2015		
BH6	Groundwater Level		9.03 mAOD		18/05/2015	Sampling Amec	

Emission point	Substance/ Parameter	Emission Limit Value	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Accreditation/ Certification ^[4]	Uncertainty ^[5]
BH7	Aluminium, Dissolved		<40 µg/l		17/02/2015	Sampling Amec/Testing EA NLS	
BH7	Antimony, Dissolved		<10 µg/l		17/02/2015	-- --	
BH7	Arsenic Dissolved	310	4.55 µg/l		17/02/2015	-- --	
BH7	Boron, Dissolved	60000	23200 µg/l		17/02/2015	-- --	
BH7	Cadmium, Dissolved	15	0.083 µg/l		17/02/2015	-- --	
BH7	Calcium, Dissolved		746 mg/l		17/02/2015	-- --	
BH7	Chromium, Dissolved		<0.5 µg/l		17/02/2015	-- --	
BH7	Copper, Dissolved		1.93 µg/l		17/02/2015	-- --	
BH7	Magnesium, Dissolved		138 mg/l		17/02/2015	-- --	
BH7	Manganese, Dissolved		1290 µg/l		17/02/2015	-- --	
BH7	Molybdenum, Dissolved	9000	3490 µg/l		17/02/2015	-- --	
BH7	Nickel, Dissolved		0.458 µg/l		17/02/2015	-- --	
BH7	Selenium Dissolved	350	<1 µg/l		17/02/2015	-- --	
BH7	Vanadium, Dissolved		<20 µg/l		17/02/2015	-- --	
BH7	Mercury, Dissolved	20	<0.01 µg/l		17/02/2015	-- --	
BH7	Alkalinity to pH 4.5 as CaCO3		355 mg/l		17/02/2015	-- --	
BH7	Conductivity at 20C		12300 uS/cm		17/02/2015	-- --	
BH7	Potassium, Dissolved		256 mg/l		17/02/2015	-- --	
BH7	Sodium, Dissolved		1990 mg/l		17/02/2015	-- --	
BH7	Sulphate, Dissolved as SO4		1870 mg/l		17/02/2015	-- --	
BH7	Nitrogen : Total Oxidised as N		<0.2 mg/l		17/02/2015	-- --	
BH7	Chloride		3400 mg/l		17/02/2015	-- --	
BH7	Fluoride		0.441 mg/l		17/02/2015	-- --	
BH7	Ammoniacal Nitrogen as N	6.6	3.11 mg/l		17/02/2015	-- --	
BH7	Carbon, Organic : Total as C :- {TOC}		0.441 mg/l		17/02/2015	-- --	
BH7	pH		7.27 pH Units		17/02/2015	-- --	
BH7	Groundwater Level		5.73 mAO		17/02/2015	Sampling Amec	

Emission point	Substance/ Parameter	Emission Limit Value	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Accreditation/ Certification ⁽⁴⁾	Uncertainty ⁽⁵⁾
BH7	Aluminium, Dissolved		<40 µg/l		18/05/2015	EA NLS	
BH7	Antimony, Dissolved		<10 µg/l		18/05/2015		
BH7	Arsenic Dissolved	310	9.13 µg/l		18/05/2015		
BH7	Boron, Dissolved	60000	19800 µg/l		18/05/2015		
BH7	Cadmium, Dissolved	15	0.095 µg/l		18/05/2015		
BH7	Calcium, Dissolved		772 mg/l		18/05/2015		
BH7	Chromium, Dissolved		<0.5 µg/l		18/05/2015		
BH7	Copper, Dissolved		0.281 µg/l		18/05/2015		
BH7	Magnesium, Dissolved		128 mg/l		18/05/2015		
BH7	Manganese, Dissolved		1310 µg/l		18/05/2015		
BH7	Molybdenum, Dissolved	9000	2660 µg/l		18/05/2015		
BH7	Nickel, Dissolved		0.5 µg/l		18/05/2015		
BH7	Selenium Dissolved	350	<1 µg/l		18/05/2015		
BH7	Vanadium, Dissolved		<20 µg/l		18/05/2015		
BH7	Mercury, Dissolved	20	<0.01 µg/l		18/05/2015		
BH7	Alkalinity to pH 4.5 as CaCO3		338 mg/l		18/05/2015		
BH7	Conductivity at 20C		11900 uS/cm		18/05/2015		
BH7	Potassium, Dissolved		239 mg/l		18/05/2015		
BH7	Sodium, Dissolved		1920 mg/l		18/05/2015		
BH7	Sulphate, Dissolved as SO4		1860 mg/l		18/05/2015		
BH7	Nitrogen : Total Oxidised as N		<0.2 mg/l		18/05/2015		
BH7	Chloride		3360 mg/l		18/05/2015		
BH7	Fluoride		0.439 mg/l		18/05/2015		
BH7	Ammoniacal Nitrogen as N	6.6	3.14 mg/l		18/05/2015		
BH7	Carbon, Organic : Total as C :- {TOC}		6 mg/l		18/05/2015		
BH7	pH		7.31 pH Units		18/05/2015		
BH7	Groundwater Level		2.72 mAOD		18/05/2015	Sampling Amec	

Emission point	Substance/ Parameter	Emission Limit Value	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Accreditation/ Certification ⁽⁴⁾	Uncertainty ⁽⁵⁾
BH8	Aluminium, Dissolved		<40 µg/l		17/02/2015	Sampling Amec/Testing EA NLS	
BH8	Antimony, Dissolved		<10 µg/l		17/02/2015	EA NLS	
BH8	Arsenic Dissolved		<1 µg/l		17/02/2015	EA NLS	
BH8	Boron, Dissolved		1820 µg/l		17/02/2015	EA NLS	
BH8	Cadmium, Dissolved		<0.03 µg/l		17/02/2015	EA NLS	
BH8	Calcium, Dissolved		207 mg/l		17/02/2015	EA NLS	
BH8	Chromium, Dissolved		<0.5 µg/l		17/02/2015	EA NLS	
BH8	Copper, Dissolved		0.235 µg/l		17/02/2015	EA NLS	
BH8	Magnesium, Dissolved		386 mg/l		17/02/2015	EA NLS	
BH8	Manganese, Dissolved		67.7 µg/l		17/02/2015	EA NLS	
BH8	Molybdenum, Dissolved		<30 µg/l		17/02/2015	EA NLS	
BH8	Nickel, Dissolved		<0.3 µg/l		17/02/2015	EA NLS	
BH8	Selenium Dissolved		<1 µg/l		17/02/2015	EA NLS	
BH8	Vanadium, Dissolved		<20 µg/l		17/02/2015	EA NLS	
BH8	Mercury, Dissolved		<0.01 µg/l		17/02/2015	EA NLS	
BH8	Alkalinity to pH 4.5 as CaCO3		700 mg/l		17/02/2015	EA NLS	
BH8	Conductivity at 20C		19300 uS/cm		17/02/2015	EA NLS	
BH8	Potassium, Dissolved		116 mg/l		17/02/2015	EA NLS	
BH8	Sodium, Dissolved		3800 mg/l		17/02/2015	EA NLS	
BH8	Sulphate, Dissolved as SO4		383 mg/l		17/02/2015	EA NLS	
BH8	Nitrogen : Total Oxidised as N		<0.2 mg/l		17/02/2015	EA NLS	
BH8	Chloride		6640 mg/l		17/02/2015	EA NLS	
BH8	Fluoride		0.536 mg/l		17/02/2015	EA NLS	
BH8	Ammoniacal Nitrogen as N		6.62 mg/l		17/02/2015	EA NLS	
BH8	Carbon, Organic : Total as C :- {TOC}		4 mg/l		17/02/2015	EA NLS	
BH8	pH		7.09 pH Units		17/02/2015	EA NLS	
BH8	Groundwater Level		4.55 mAOD		17/02/2015	Sampling Amec	

Emission point, Substance/ Parameter	Emission Limit Value	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Accreditation/ Certification ⁽⁴⁾	Uncertainty ⁽⁵⁾
BH8 Aluminium, Dissolved		<40 µg/l		18/05/2015	EA NLS	
BH8 Antimony, Dissolved		<10 µg/l		18/05/2015	EA NLS	
BH8 Arsenic Dissolved		<1 µg/l		18/05/2015	EA NLS	
BH8 Boron, Dissolved		2010 µg/l		18/05/2015	EA NLS	
BH8 Cadmium, Dissolved		<0.03 µg/l		18/05/2015	EA NLS	
BH8 Calcium, Dissolved		219 mg/l		18/05/2015	EA NLS	
BH8 Chromium, Dissolved		<0.5 µg/l		18/05/2015	EA NLS	
BH8 Copper, Dissolved		<0.2 µg/l		18/05/2015	EA NLS	
BH8 Magnesium, Dissolved		424 mg/l		18/05/2015	EA NLS	
BH8 Manganese, Dissolved		74.3 µg/l		18/05/2015	EA NLS	
BH8 Molybdenum, Dissolved		<30 µg/l		18/05/2015	EA NLS	
BH8 Nickel, Dissolved		<0.3 µg/l		18/05/2015	EA NLS	
BH8 Selenium Dissolved		<1 µg/l		18/05/2015	EA NLS	
BH8 Vanadium, Dissolved		<20 µg/l		18/05/2015	EA NLS	
BH8 Mercury, Dissolved		<0.01 µg/l		18/05/2015	EA NLS	
BH8 Alkalinity to pH 4.5 as CaCO3		701 mg/l		18/05/2015	EA NLS	
BH8 Conductivity at 20C		19200 uS/cm		18/05/2015	EA NLS	
BH8 Potassium, Dissolved		129 mg/l		18/05/2015	EA NLS	
BH8 Sodium, Dissolved		3710 mg/l		18/05/2015	EA NLS	
BH8 Sulphate, Dissolved as SO4		408 mg/l		18/05/2015	EA NLS	
BH8 Nitrogen : Total Oxidised as N		<0.2 mg/l		18/05/2015	EA NLS	
BH8 Chloride		6640 mg/l		18/05/2015	EA NLS	
BH8 Fluoride		0.561 mg/l		18/05/2015	EA NLS	
BH8 Ammoniacal Nitrogen as N		6.71 mg/l		18/05/2015	EA NLS	
BH8 Carbon, Organic : Total as C :- {TOC}		<1 mg/l		18/05/2015	EA NLS	
BH8 pH		7.24 pH Units		18/05/2015	EA NLS	
BH8 Groundwater Level		5.82 mAOD		18/05/2015	Sampling Amec	

Emission point	Substance/ Parameter	Emission Limit Value	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Accreditation/ Certification ⁽⁴⁾	Uncertainty ⁽⁵⁾
BH9	Aluminium, Dissolved		<10 µg/l		17/02/2015	Sampling Amec/Testing EA NLS	
BH9	Antimony, Dissolved		<1 µg/l		17/02/2015		
BH9	Arsenic Dissolved		<1 µg/l		17/02/2015		
BH9	Boron, Dissolved		103 µg/l		17/02/2015		
BH9	Cadmium, Dissolved		<0.1 µg/l		17/02/2015		
BH9	Calcium, Dissolved		79.1 mg/l		17/02/2015		
BH9	Chromium, Dissolved		<0.5 µg/l		17/02/2015		
BH9	Copper, Dissolved		<1 µg/l		17/02/2015		
BH9	Magnesium, Dissolved		18.5 mg/l		17/02/2015		
BH9	Manganese, Dissolved		<10 µg/l		17/02/2015		
BH9	Molybdenum, Dissolved		<3 µg/l		17/02/2015		
BH9	Nickel, Dissolved		<1 µg/l		17/02/2015		
BH9	Selenium Dissolved		<1 µg/l		17/02/2015		
BH9	Vanadium, Dissolved		<2 µg/l		17/02/2015		
BH9	Mercury, Dissolved		<0.01 µg/l		17/02/2015		
BH9	Alkalinity to pH 4.5 as CaCO3		258 mg/l		17/02/2015		
BH9	Conductivity at 20C		564 uS/cm		17/02/2015		
BH9	Potassium, Dissolved		1.79 mg/l		17/02/2015		
BH9	Sodium, Dissolved		18.2 mg/l		17/02/2015		
BH9	Sulphate, Dissolved as SO4		28.5 mg/l		17/02/2015		
BH9	Nitrogen : Total Oxidised as N		3.15 mg/l		17/02/2015		
BH9	Chloride		28 mg/l		17/02/2015		
BH9	Fluoride		0.216 mg/l		17/02/2015		
BH9	Ammoniacal Nitrogen as N		0.03 mg/l		17/02/2015		
BH9	Carbon, Organic : Total as C :- {TOC}		1 mg/l		17/02/2015		
BH9	pH		7.59 pH Units		17/02/2015		
BH9	Groundwater Level		1.41 mAOB		17/02/2015	Sampling Amec	

Emission point	Substance/Parameter	Emission Limit Value	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Accreditation/ Certification ^[4]	Uncertainty ^[5]
BH9	Aluminium, Dissolved		<10 µg/l		18/05/2015	Sampling Amec/Testing EA NLS	
BH9	Antimony, Dissolved		<1 µg/l		18/05/2015	-- --	
BH9	Arsenic Dissolved		<1 µg/l		18/05/2015	-- --	
BH9	Boron, Dissolved		110 µg/l		18/05/2015	-- --	
BH9	Cadmium, Dissolved		<0.1 µg/l		18/05/2015	-- --	
BH9	Calcium, Dissolved		83.1 mg/l		18/05/2015	-- --	
BH9	Chromium, Dissolved		<0.5 µg/l		18/05/2015	-- --	
BH9	Copper, Dissolved		<1 µg/l		18/05/2015	-- --	
BH9	Magnesium, Dissolved		19.3 mg/l		18/05/2015	-- --	
BH9	Manganese, Dissolved		<10 µg/l		18/05/2015	-- --	
BH9	Molybdenum, Dissolved		<3 µg/l		18/05/2015	-- --	
BH9	Nickel, Dissolved		<1 µg/l		18/05/2015	-- --	
BH9	Selenium Dissolved		<1 µg/l		18/05/2015	-- --	
BH9	Vanadium, Dissolved		<2 µg/l		18/05/2015	-- --	
BH9	Mercury, Dissolved		<0.01 µg/l		18/05/2015	-- --	
BH9	Alkalinity to pH 4.5 as CaCO3		254 mg/l		18/05/2015	-- --	
BH9	Conductivity at 20C		552 uS/cm		18/05/2015	-- --	
BH9	Potassium, Dissolved		1.92 mg/l		18/05/2015	-- --	
BH9	Sodium, Dissolved		21.4 mg/l		18/05/2015	-- --	
BH9	Sulphate, Dissolved as SO4		28 mg/l		18/05/2015	-- --	
BH9	Nitrogen : Total Oxidised as N		3.02 mg/l		18/05/2015	-- --	
BH9	Chloride		31.7 mg/l		18/05/2015	-- --	
BH9	Fluoride		0.156 mg/l		18/05/2015	-- --	
BH9	Ammoniacal Nitrogen as N		0.03 mg/l		18/05/2015	-- --	
BH9	Carbon, Organic : Total as C :- {TOC}		<1 mg/l		18/05/2015	-- --	
BH9	pH		7.5 pH Units		18/05/2015	-- --	
BH9	Groundwater Level		4.89 mAO		18/05/2015	Sampling Amec	

Emission point	Substance/Parameter	Emission Limit Value	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Accreditation/ Certification ⁽⁴⁾	Uncertainty ⁽⁵⁾
BH10	Aluminium, Dissolved		<40 µg/l		17/02/2015	Sampling Amec/Testing EA NLS	
BH10	Antimony, Dissolved		<10 µg/l		17/02/2015	EA NLS	
BH10	Arsenic Dissolved		19 µg/l		17/02/2015	EA NLS	
BH10	Boron, Dissolved		8410 µg/l		17/02/2015	EA NLS	
BH10	Cadmium, Dissolved		<0.03 µg/l		17/02/2015	EA NLS	
BH10	Calcium, Dissolved		369 mg/l		17/02/2015	EA NLS	
BH10	Chromium, Dissolved		<0.5 µg/l		17/02/2015	EA NLS	
BH10	Copper, Dissolved		<0.2 µg/l		17/02/2015	EA NLS	
BH10	Magnesium, Dissolved		569 mg/l		17/02/2015	EA NLS	
BH10	Manganese, Dissolved		429 µg/l		17/02/2015	EA NLS	
BH10	Molybdenum, Dissolved		308 µg/l		17/02/2015	EA NLS	
BH10	Nickel, Dissolved		<0.3 µg/l		17/02/2015	EA NLS	
BH10	Selenium Dissolved		<1 µg/l		17/02/2015	EA NLS	
BH10	Vanadium, Dissolved		<20 µg/l		17/02/2015	EA NLS	
BH10	Mercury, Dissolved		<0.01 µg/l		17/02/2015	EA NLS	
BH10	Alkalinity to pH 4.5 as CaCO ₃		1020 mg/l		17/02/2015	EA NLS	
BH10	Conductivity at 20C		23700 uS/cm		17/02/2015	EA NLS	
BH10	Potassium, Dissolved		195 mg/l		17/02/2015	EA NLS	
BH10	Sodium, Dissolved		4570 mg/l		17/02/2015	EA NLS	
BH10	Sulphate, Dissolved as SO ₄		961 mg/l		17/02/2015	EA NLS	
BH10	Nitrogen : Total Oxidised as N		<0.2 mg/l		17/02/2015	EA NLS	
BH10	Chloride		8080 mg/l		17/02/2015	EA NLS	
BH10	Fluoride		0.178 mg/l		17/02/2015	EA NLS	
BH10	Ammoniacal Nitrogen as N		42.4 mg/l		17/02/2015	EA NLS	
BH10	Carbon, Organic : Total as C :- {TOC}		8.3 mg/l		17/02/2015	EA NLS	
BH10	pH		7.39 pH Units		17/02/2015	EA NLS	
BH10	Groundwater Level		3.85 mAOD		17/02/2015	Sampling Amec	

Emission point/ Parameter	Substance/ Parameter	Emission Limit Value	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Accreditation/ Certification ⁽⁴⁾	Uncertainty ⁽⁵⁾
BH10	Aluminium, Dissolved		<40 µg/l		18/05/2015	EA NLS	
BH10	Antimony, Dissolved		<10 µg/l		18/05/2015	EA NLS	
BH10	Arsenic Dissolved		7.34 µg/l		18/05/2015	EA NLS	
BH10	Boron, Dissolved		18100 µg/l		18/05/2015	EA NLS	
BH10	Cadmium, Dissolved		0.068 µg/l		18/05/2015	EA NLS	
BH10	Calcium, Dissolved		568 mg/l		18/05/2015	EA NLS	
BH10	Chromium, Dissolved		<0.5 µg/l		18/05/2015	EA NLS	
BH10	Copper, Dissolved		<0.2 µg/l		18/05/2015	EA NLS	
BH10	Magnesium, Dissolved		282 mg/l		18/05/2015	EA NLS	
BH10	Manganese, Dissolved		1200 µg/l		18/05/2015	EA NLS	
BH10	Molybdenum, Dissolved		1740 µg/l		18/05/2015	EA NLS	
BH10	Nickel, Dissolved		<0.3 µg/l		18/05/2015	EA NLS	
BH10	Selenium Dissolved		<1 µg/l		18/05/2015	EA NLS	
BH10	Vanadium, Dissolved		<20 µg/l		18/05/2015	EA NLS	
BH10	Mercury, Dissolved		<0.01 µg/l		18/05/2015	EA NLS	
BH10	Alkalinity to pH 4.5 as CaCO3		499 mg/l		18/05/2015	EA NLS	
BH10	Conductivity at 20C		9920 uS/cm		18/05/2015	EA NLS	
BH10	Potassium, Dissolved		132 mg/l		18/05/2015	EA NLS	
BH10	Sodium, Dissolved		1630 mg/l		18/05/2015	EA NLS	
BH10	Sulphate, Dissolved as SO4		1600 mg/l		18/05/2015	EA NLS	
BH10	Nitrogen : Total Oxidised as N		<0.2 mg/l		18/05/2015	EA NLS	
BH10	Chloride		2720 mg/l		18/05/2015	EA NLS	
BH10	Fluoride		0.262 mg/l		18/05/2015	EA NLS	
BH10	Ammoniacal Nitrogen as N		4.4 mg/l		18/05/2015	EA NLS	
BH10	Carbon, Organic : Total as C :- {TOC}		1.4 mg/l		18/05/2015	EA NLS	
BH10	pH		7.4 pH Units		18/05/2015	EA NLS	
BH10	Groundwater Level		1.89 mAOD		18/05/2015	Sampling Amec	

Emission point	Substance/ Parameter	Emission Limit Value	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Accreditation/ Certification ^[4]	Uncertainty ^[5]
BH11	Aluminium, Dissolved		<40 µg/l		17/02/2015	Sampling Artec/Testing EA NLS	
BH11	Antimony, Dissolved		<10 µg/l		17/02/2015	— — —	
BH11	Arsenic Dissolved		30.1 µg/l		17/02/2015	— — —	
BH11	Boron, Dissolved		6350 µg/l		17/02/2015	— — —	
BH11	Cadmium, Dissolved		<0.03 µg/l		17/02/2015	— — —	
BH11	Calcium, Dissolved		224 mg/l		17/02/2015	— — —	
BH11	Chromium, Dissolved		<0.5 µg/l		17/02/2015	— — —	
BH11	Copper, Dissolved		<0.2 µg/l		17/02/2015	— — —	
BH11	Magnesium, Dissolved		85.5 mg/l		17/02/2015	— — —	
BH11	Manganese, Dissolved		569 µg/l		17/02/2015	— — —	
BH11	Molybdenum, Dissolved		375 µg/l		17/02/2015	— — —	
BH11	Nickel, Dissolved		<0.3 µg/l		17/02/2015	— — —	
BH11	Selenium Dissolved		<1 µg/l		17/02/2015	— — —	
BH11	Vanadium, Dissolved		<20 µg/l		17/02/2015	— — —	
BH11	Mercury, Dissolved		<0.01 µg/l		17/02/2015	— — —	
BH11	Alkalinity to pH 4.5 as CaCO ₃		620 mg/l		17/02/2015	— — —	
BH11	Conductivity at 20C		2730 uS/cm		17/02/2015	— — —	
BH11	Potassium, Dissolved		43.6 mg/l		17/02/2015	— — —	
BH11	Sodium, Dissolved		268 mg/l		17/02/2015	— — —	
BH11	Sulphate, Dissolved as SO ₄		334 mg/l		17/02/2015	— — —	
BH11	Nitrogen : Total Oxidised as N		<0.2 mg/l		17/02/2015	— — —	
BH11	Chloride		443 mg/l		17/02/2015	— — —	
BH11	Fluoride		0.133 mg/l		17/02/2015	— — —	
BH11	Ammoniacal Nitrogen as N		1.27 mg/l		17/02/2015	— — —	
BH11	Carbon, Organic : Total as C :- {TOC}		1.7 mg/l		17/02/2015	— — —	
BH11	pH		7.48 pH Units		17/02/2015	— — —	
BH11	Groundwater Level		3.85 mAOD		17/02/2015	Sampling Artec	

Emission point	Substance/Parameter	Emission Limit Value	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[1]	Accreditation/ Certification ^[4]	Uncertainty ^[5]
BH11	Aluminium, Dissolved		<40 µg/l		18/05/2015	EA NLS	
BH11	Antimony, Dissolved		<10 µg/l		18/05/2015	EA NLS	
BH11	Arsenic Dissolved		29.2 µg/l		18/05/2015	EA NLS	
BH11	Boron, Dissolved		7270 µg/l		18/05/2015	EA NLS	
BH11	Cadmium, Dissolved		<0.03 µg/l		18/05/2015	EA NLS	
BH11	Calcium, Dissolved		258 mg/l		18/05/2015	EA NLS	
BH11	Chromium, Dissolved		<0.5 µg/l		18/05/2015	EA NLS	
BH11	Copper, Dissolved		<0.2 µg/l		18/05/2015	EA NLS	
BH11	Magnesium, Dissolved		103 mg/l		18/05/2015	EA NLS	
BH11	Manganese, Dissolved		731 µg/l		18/05/2015	EA NLS	
BH11	Molybdenum, Dissolved		488 µg/l		18/05/2015	EA NLS	
BH11	Nickel, Dissolved		<0.3 µg/l		18/05/2015	EA NLS	
BH11	Selenium Dissolved		<1 µg/l		18/05/2015	EA NLS	
BH11	Vanadium, Dissolved		<20 µg/l		18/05/2015	EA NLS	
BH11	Mercury, Dissolved		<0.01 µg/l		18/05/2015	EA NLS	
BH11	Alkalinity to pH 4.5 as CaCO ₃		630 mg/l		18/05/2015	EA NLS	
BH11	Conductivity at 20C		3110 uS/cm		18/05/2015	EA NLS	
BH11	Potassium, Dissolved		55.9 mg/l		18/05/2015	EA NLS	
BH11	Sodium, Dissolved		360 mg/l		18/05/2015	EA NLS	
BH11	Sulphate, Dissolved as SO ₄		485 mg/l		18/05/2015	EA NLS	
BH11	Nitrogen : Total Oxidised as N		<0.2 mg/l		18/05/2015	EA NLS	
BH11	Chloride		543 mg/l		18/05/2015	EA NLS	
BH11	Fluoride		0.188 mg/l		18/05/2015	EA NLS	
BH11	Ammoniacal Nitrogen as N		1.83 mg/l		18/05/2015	EA NLS	
BH11	Carbon, Organic : Total as C		6 mg/l		18/05/2015	EA NLS	
BH11	:- (TOC)						
BH11	pH		7.52 pH Units		18/05/2015	EA NLS	
BH11	Groundwater Level		4.25 mAOD		18/05/2015	Sampling Amec	

[1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum - maximum' measured values.

[2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, e.g. colorimetry.

[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements, or flow/time proportional samples, the percentage of the process operating time covered by the monitoring is given.

[4] The accreditation status of the equipment and/or the monitoring organisation, as appropriate, for the methods used for both sampling and analysis.

[5] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

[6] The emission limit values for all substances is expressed as a maximum individual value, unless otherwise stated.

Signed A. J. J. J. Date 28/07/15
(authorised to sign as representative of the Operator)

Reporting of Emission to Surface Water for the period from1st Jan 2015.....to.....30th June 2015.....

Operator : RWE Generation UK plc

Form: Water1

Location: Aberthaw Ash Disposal Site

Permit/Variation Number: DP3432SW

Emission point	Substance/ Parameter	Emission Limit Value	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Accreditation/ Certification ⁽⁴⁾	Uncertainty ⁽⁵⁾
S1 (Group Five Spring)	Aluminium		8340 ug/l		19/02/2015	Sampling Station/Testing EA NLS	
S1 (Group Five Spring)	Antimony		100 ug/l		19/02/2015		
S1 (Group Five Spring)	Arsenic		35.2 ug/l		19/02/2015		
S1 (Group Five Spring)	Boron		594 ug/l		19/02/2015		
S1 (Group Five Spring)	Cadmium		0.237 ug/l		19/02/2015		
S1 (Group Five Spring)	Calcium		900 mg/l		19/02/2015		
S1 (Group Five Spring)	Chromium		1.8 ug/l		19/02/2015		
S1 (Group Five Spring)	Copper		40.9 ug/l		19/02/2015		
S1 (Group Five Spring)	Magnesium		521 mg/l		19/02/2015		
S1 (Group Five Spring)	Manganese		126 ug/l		19/02/2015		
S1 (Group Five Spring)	Molybdenum		<10 ug/l		19/02/2015		
S1 (Group Five Spring)	Nickel		0.392 ug/l		19/02/2015		
S1 (Group Five Spring)	Selenium		6.9 ug/l		19/02/2015		
S1 (Group Five Spring)	Vanadium		2600 ug/l		19/02/2015		
S1 (Group Five Spring)	Mercury		0.0122 ug/l		19/02/2015		
S1 (Group Five Spring)	Conductivity		9590 uS/cm		19/02/2015		
S1 (Group Five Spring)	Potassium		1480 mg/l		19/02/2015		
S1 (Group Five Spring)	Sodium		964 mg/l		19/02/2015		
S1 (Group Five Spring)	Sulphate		40.5 mg/l		19/02/2015		
S1 (Group Five Spring)	Nitrogen (Total Oxidised) as N		21.3 mg/l		19/02/2015		
S1 (Group Five Spring)	Chloride		2880 mg/l		19/02/2015		
S1 (Group Five Spring)	Fluoride		0.1 mg/l		19/02/2015		
S1 (Group Five Spring)	Ammoniacal Nitrogen as N		2.07 mg/l		19/02/2015		
S1 (Group Five Spring)	Carbon (Total Organic)		3.4 mg/l		19/02/2015		
S1 (Group Five Spring)	pH		7.38 pH Units		19/02/2015		

Emission point	Substance/ Parameter	Emission Limit Value	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Accreditation/ Certification ^[4]	Uncertainty ^[5]
S1 (Group Five Spring)	Aluminium		1050 ug/l		13/05/2015	Sampling Station/Testing EA NLS	
S1 (Group Five Spring)	Antimony		192 ug/l		13/05/2015		
S1 (Group Five Spring)	Arsenic		86.1 ug/l		13/05/2015		
S1 (Group Five Spring)	Boron		87.3 ug/l		13/05/2015		
S1 (Group Five Spring)	Cadmium		0.034 ug/l		13/05/2015		
S1 (Group Five Spring)	Calcium		<100 mg/l		13/05/2015		
S1 (Group Five Spring)	Chromium		0.51 ug/l		13/05/2015		
S1 (Group Five Spring)	Copper		2.36 ug/l		13/05/2015		
S1 (Group Five Spring)	Magnesium		40.2 mg/l		13/05/2015		
S1 (Group Five Spring)	Manganese		19.9 ug/l		13/05/2015		
S1 (Group Five Spring)	Molybdenum		<10 ug/l		13/05/2015		
S1 (Group Five Spring)	Nickel		1.04 ug/l		13/05/2015		
S1 (Group Five Spring)	Selenium		6.88 ug/l		13/05/2015		
S1 (Group Five Spring)	Vanadium		204 ug/l		13/05/2015		
S1 (Group Five Spring)	Mercury		0.0117 ug/l		13/05/2015		
S1 (Group Five Spring)	Conductivity		1420 uS/cm		13/05/2015		
S1 (Group Five Spring)	Potassium		181 mg/l		13/05/2015		
S1 (Group Five Spring)	Sodium		185 mg/l		13/05/2015		
S1 (Group Five Spring)	Sulphate		27.9 mg/l		13/05/2015		
S1 (Group Five Spring)	Nitrogen (Total Oxidised) as N		<0.200 mg/l		13/05/2015		
S1 (Group Five Spring)	Chloride		305 mg/l		13/05/2015		
S1 (Group Five Spring)	Fluoride		0.538 mg/l		13/05/2015		
S1 (Group Five Spring)	Ammoniacal Nitrogen as N		0.025 mg/l		13/05/2015		
S1 (Group Five Spring)	Carbon (Total Organic)		4.4 mg/l		13/05/2015		
S1 (Group Five Spring)	pH		7.67 pH Units		13/05/2015		

Emission point	Substance/ Parameter	Emission Limit Value	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Accreditation/ Certification ⁽⁴⁾	Uncertainty ⁽⁵⁾
Eastern Perimeter Drain	Aluminium		2460 ug/l		19/02/2015	Sampling Station/Testing EA NLS	
Eastern Perimeter Drain	Antimony		110 ug/l		19/02/2015		
Eastern Perimeter Drain	Arsenic		1.78 ug/l		19/02/2015		
Eastern Perimeter Drain	Boron		220 ug/l		19/02/2015		
Eastern Perimeter Drain	Cadmium		0.082 ug/l		19/02/2015		
Eastern Perimeter Drain	Calcium		183 mg/l		19/02/2015		
Eastern Perimeter Drain	Chromium		<0.5 ug/l		19/02/2015		
Eastern Perimeter Drain	Copper		1.78 ug/l		19/02/2015		
Eastern Perimeter Drain	Magnesium		211 mg/l		19/02/2015		
Eastern Perimeter Drain	Manganese		24.8 ug/l		19/02/2015		
Eastern Perimeter Drain	Molybdenum		<10 ug/l		19/02/2015		
Eastern Perimeter Drain	Nickel		0.883 ug/l		19/02/2015		
Eastern Perimeter Drain	Selenium		<1 ug/l		19/02/2015		
Eastern Perimeter Drain	Vanadium		440 ug/l		19/02/2015		
Eastern Perimeter Drain	Mercury		<0.01 ug/l		19/02/2015		
Eastern Perimeter Drain	Conductivity		1940 uS/cm		19/02/2015		
Eastern Perimeter Drain	Potassium		196 mg/l		19/02/2015		
Eastern Perimeter Drain	Sodium		335 mg/l		19/02/2015		
Eastern Perimeter Drain	Sulphate		<20 mg/l		19/02/2015		
Eastern Perimeter Drain	Nitrogen (Total Oxidised) as N		2.28 mg/l		19/02/2015		
Eastern Perimeter Drain	Chloride		337 mg/l		19/02/2015		
Eastern Perimeter Drain	Fluoride		0.107 mg/l		19/02/2015		
Eastern Perimeter Drain	Ammoniacal Nitrogen as N		0.051 mg/l		19/02/2015		
Eastern Perimeter Drain	Carbon (Total Organic)		1.9 mg/l		19/02/2015		
Eastern Perimeter Drain	pH		7.96 pH Units		19/02/2015		

Emission point	Substance/ Parameter	Emission Limit Value	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Accreditation/ Certification ^[4]	Uncertainty ^[5]
Eastern Perimeter Drain	Aluminium		1900 ug/l		13/05/2015	Sampling Station/Testing EA NLS	
Eastern Perimeter Drain	Antimony		<40 ug/l		13/05/2015		
Eastern Perimeter Drain	Arsenic		2.26 ug/l		13/05/2015		
Eastern Perimeter Drain	Boron		176 ug/l		13/05/2015		
Eastern Perimeter Drain	Cadmium		<0.03 ug/l		13/05/2015		
Eastern Perimeter Drain	Calcium		<100 mg/l		13/05/2015		
Eastern Perimeter Drain	Chromium		<0.5 ug/l		13/05/2015		
Eastern Perimeter Drain	Copper		1.03 ug/l		13/05/2015		
Eastern Perimeter Drain	Magnesium		61.1 mg/l		13/05/2015		
Eastern Perimeter Drain	Manganese		14.1 ug/l		13/05/2015		
Eastern Perimeter Drain	Molybdenum		<10 ug/l		13/05/2015		
Eastern Perimeter Drain	Nickel		<0.3 ug/l		13/05/2015		
Eastern Perimeter Drain	Selenium		<1 ug/l		13/05/2015		
Eastern Perimeter Drain	Vanadium		328 ug/l		13/05/2015		
Eastern Perimeter Drain	Mercury		<0.01 ug/l		13/05/2015		
Eastern Perimeter Drain	Conductivity		1600 uS/cm		13/05/2015		
Eastern Perimeter Drain	Potassium		152 mg/l		13/05/2015		
Eastern Perimeter Drain	Sodium		245 mg/l		13/05/2015		
Eastern Perimeter Drain	Sulphate		<20 mg/l		13/05/2015		
Eastern Perimeter Drain	Nitrogen (Total Oxidised) as N		2.87 mg/l		13/05/2015		
Eastern Perimeter Drain	Chloride		260 mg/l		13/05/2015		
Eastern Perimeter Drain	Fluoride		0.102 mg/l		13/05/2015		
Eastern Perimeter Drain	Ammoniacal Nitrogen as N		<0.0100 mg/l		13/05/2015		
Eastern Perimeter Drain	Carbon (Total Organic)		1.1 mg/l		13/05/2015		
Eastern Perimeter Drain	pH		8.14 pH Units		13/05/2015		

Emission point	Substance/ Parameter	Emission Limit Value	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Accreditation/ Certification ⁽⁴⁾	Uncertainty ⁽⁵⁾
S3 (River Thaw)	Aluminium		<700 ug/l		19/02/2015	Sampling Station/Testing EA NLS	
S3 (River Thaw)	Antimony		220 ug/l		19/02/2015		
S3 (River Thaw)	Arsenic		<1 ug/l		19/02/2015		
S3 (River Thaw)	Boron		151 ug/l		19/02/2015		
S3 (River Thaw)	Cadmium		0.121 ug/l		19/02/2015		
S3 (River Thaw)	Calcium		300 mg/l		19/02/2015		
S3 (River Thaw)	Chromium		0.71 ug/l		19/02/2015		
S3 (River Thaw)	Copper		1.51 ug/l		19/02/2015		
S3 (River Thaw)	Magnesium		24.9 mg/l		19/02/2015		
S3 (River Thaw)	Manganese		46.5 ug/l		19/02/2015		
S3 (River Thaw)	Molybdenum		<10 ug/l		19/02/2015		
S3 (River Thaw)	Nickel		0.613 ug/l		19/02/2015		
S3 (River Thaw)	Selenium		<1 ug/l		19/02/2015		
S3 (River Thaw)	Vanadium		<30 ug/l		19/02/2015		
S3 (River Thaw)	Mercury		<0.01 ug/l		19/02/2015		
S3 (River Thaw)	Conductivity		6490 uS/cm		19/02/2015		
S3 (River Thaw)	Potassium		1080 mg/l		19/02/2015		
S3 (River Thaw)	Sodium		299 mg/l		19/02/2015		
S3 (River Thaw)	Sulphate		<20 mg/l		19/02/2015		
S3 (River Thaw)	Nitrogen (Total Oxidised) as N		3.37 mg/l		19/02/2015		
S3 (River Thaw)	Chloride		1940 mg/l		19/02/2015		
S3 (River Thaw)	Fluoride		0.217 mg/l		19/02/2015		
S3 (River Thaw)	Ammoniacal Nitrogen as N		0.046 mg/l		19/02/2015		
S3 (River Thaw)	Carbon (Total Organic)		2 mg/l		19/02/2015		
S3 (River Thaw)	pH		8 pH Units		19/02/2015		

Emission point	Substance/ Parameter	Emission Limit Value	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Accreditation/ Certification ⁽⁴⁾	Uncertainty ⁽⁵⁾
S3 (River Thaw)	Aluminium		<700 ug/l		13/05/2015	Sampling Station/Testing EA NLS	
S3 (River Thaw)	Antimony		112 ug/l		13/05/2015		
S3 (River Thaw)	Arsenic		<1 ug/l		13/05/2015		
S3 (River Thaw)	Boron		113 ug/l		13/05/2015		
S3 (River Thaw)	Cadmium		0.035 ug/l		13/05/2015		
S3 (River Thaw)	Calcium		177 mg/l		13/05/2015		
S3 (River Thaw)	Chromium		<0.5 ug/l		13/05/2015		
S3 (River Thaw)	Copper		1.44 ug/l		13/05/2015		
S3 (River Thaw)	Magnesium		26.1 mg/l		13/05/2015		
S3 (River Thaw)	Manganese		2.63 ug/l		13/05/2015		
S3 (River Thaw)	Molybdenum		<10 ug/l		13/05/2015		
S3 (River Thaw)	Nickel		2.29 ug/l		13/05/2015		
S3 (River Thaw)	Selenium		<1 ug/l		13/05/2015		
S3 (River Thaw)	Vanadium		<30 ug/l		13/05/2015		
S3 (River Thaw)	Mercury		<0.01 ug/l		13/05/2015		
S3 (River Thaw)	Conductivity		663 uS/cm		13/05/2015		
S3 (River Thaw)	Potassium		28.2 mg/l		13/05/2015		
S3 (River Thaw)	Sodium		31.9 mg/l		13/05/2015		
S3 (River Thaw)	Sulphate		<20 mg/l		13/05/2015		
S3 (River Thaw)	Nitrogen (Total Oxidised) as N		3.96 mg/l		13/05/2015		
S3 (River Thaw)	Chloride		44 mg/l		13/05/2015		
S3 (River Thaw)	Fluoride		0.079 mg/l		13/05/2015		
S3 (River Thaw)	Ammoniacal Nitrogen as N		0.018 mg/l		13/05/2015		
S3 (River Thaw)	Carbon (Total Organic)		1.7 mg/l		13/05/2015		
S3 (River Thaw)	pH		8.16 pH Units		13/05/2015		

Emission point	Substance/ Parameter	Emission Limit Value	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Accreditation/ Certification ⁽⁴⁾	Uncertainty ⁽⁵⁾
Brackish Lagoon	Aluminium		1930 ug/l		19/02/2015	Sampling Station/Testing EA NLS	
Brackish Lagoon	Antimony		<40 ug/l		19/02/2015		
Brackish Lagoon	Arsenic		1.91 ug/l		19/02/2015		
Brackish Lagoon	Boron		172 ug/l		19/02/2015		
Brackish Lagoon	Cadmium		0.156 ug/l		19/02/2015		
Brackish Lagoon	Calcium		<100 mg/l		19/02/2015		
Brackish Lagoon	Chromium		<0.5 ug/l		19/02/2015		
Brackish Lagoon	Copper		3.03 ug/l		19/02/2015		
Brackish Lagoon	Magnesium		42.6 mg/l		19/02/2015		
Brackish Lagoon	Manganese		36.9 ug/l		19/02/2015		
Brackish Lagoon	Molybdenum		<10 ug/l		19/02/2015		
Brackish Lagoon	Nickel		0.906 ug/l		19/02/2015		
Brackish Lagoon	Selenium		<1 ug/l		19/02/2015		
Brackish Lagoon	Vanadium		353 ug/l		19/02/2015		
Brackish Lagoon	Mercury		0.0134 ug/l		19/02/2015		
Brackish Lagoon	Conductivity		3230 uS/cm		19/02/2015		
Brackish Lagoon	Potassium		459 mg/l		19/02/2015		
Brackish Lagoon	Sodium		310 mg/l		19/02/2015		
Brackish Lagoon	Sulphate		<20 mg/l		19/02/2015		
Brackish Lagoon	Nitrogen (Total Oxidised) as N		2.2 mg/l		19/02/2015		
Brackish Lagoon	Chloride		829 mg/l		19/02/2015		
Brackish Lagoon	Fluoride		0.151 mg/l		19/02/2015		
Brackish Lagoon	Ammoniacal Nitrogen as N		0.053 mg/l		19/02/2015		
Brackish Lagoon	Carbon (Total Organic)		1.7 mg/l		19/02/2015		
Brackish Lagoon	pH		8.18 pH Units		19/02/2015		

Emission point	Substance/ Parameter	Emission Limit Value	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Accreditation/ Certification ^[4]	Uncertainty ^[5]
Brackish Lagoon	Aluminium		2750 ug/l		13/05/2015		
Brackish Lagoon	Antimony		<40 ug/l		13/05/2015		
Brackish Lagoon	Arsenic		<1 ug/l		13/05/2015		
Brackish Lagoon	Boron		199 ug/l		13/05/2015		
Brackish Lagoon	Cadmium		0.036 ug/l		13/05/2015		
Brackish Lagoon	Calcium		<100 mg/l		13/05/2015		
Brackish Lagoon	Chromium		<0.5 ug/l		13/05/2015		
Brackish Lagoon	Copper		0.964 ug/l		13/05/2015		
Brackish Lagoon	Magnesium		193 mg/l		13/05/2015		
Brackish Lagoon	Manganese		75.9 ug/l		13/05/2015		
Brackish Lagoon	Molybdenum		<10 ug/l		13/05/2015		
Brackish Lagoon	Nickel		<0.3 ug/l		13/05/2015		
Brackish Lagoon	Selenium		<1 ug/l		13/05/2015		
Brackish Lagoon	Vanadium		483 ug/l		13/05/2015		
Brackish Lagoon	Mercury		<0.01 ug/l		13/05/2015		
Brackish Lagoon	Conductivity		8090 uS/cm		13/05/2015		
Brackish Lagoon	Potassium		1340 mg/l		13/05/2015		
Brackish Lagoon	Sodium		556 mg/l		13/05/2015		
Brackish Lagoon	Sulphate		<20 mg/l		13/05/2015		
Brackish Lagoon	Nitrogen (Total Oxidised) as N		1.41 mg/l		13/05/2015		
Brackish Lagoon	Chloride		2520 mg/l		13/05/2015		
Brackish Lagoon	Fluoride		0.206 mg/l		13/05/2015		
Brackish Lagoon	Ammoniacal Nitrogen as N		<0.0100 mg/l		13/05/2015		
Brackish Lagoon	Carbon (Total Organic)		3.3 mg/l		13/05/2015		
Brackish Lagoon	pH		8.02 pH Units		13/05/2015		

Sampling Station/Testing
EA NLS

[1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum - maximum' measured values.

[2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, e.g. colorimetry.

[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements, or flow/time proportional samples, the percentage of the process operating time covered by the monitoring is given.

[4] The accreditation status of the equipment and/or the monitoring organisation, as appropriate, for the methods used for both sampling and analysis.

[5] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

[6] The emission limit values for all substances is expressed as a maximum individual value, unless otherwise stated.

Signed A. Javher Date 28/07/15 (authorised to sign as representative of the Operator)