Reporting of Emission to Groundwater for the period from ...1st July 2019....to...31st December 2019.

Operator : RWE Generation UK plc **Form:** Groundwater1

Location: Aberthaw Power Station

Permit/Variation Number: RP3133LD

Emission point	Substance/ Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
BH12	Aluminium, Dissolved		<10 µg/l		28/08/2019	Sampling Amec/Testing EA NLS	
	Antimony, Dissolved		<1 µg/l				
	Arsenic Dissolved		<1 µg/l				
	Boron, Dissolved		690 µg/l				
	Cadmium, Dissolved		<0.1 µg/l				
	Calcium, Dissolved		230 mg/l				
	Chromium, Dissolved		1 µg/l				
	Copper, Dissolved		1.30 µg/l				
	Magnesium, Dissolved		170 mg/l				
	Manganese, Dissolved		<10 µg/l				
	Molybdenum, Dissolved		4 µg/l				
	Nickel, Dissolved		1.3 µg/l				
	Selenium Dissolved		0.00 µg/l				
	Vanadium, Dissolved		<2 µg/l				
	Zinc, Dissolved		16 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		260 mg/l				
	Conductivity at 20C		7700 uS/cm				
	Potassium, Dissolved		44 mg/l				
	Sodium, Dissolved		1300 mg/l				
	Sulphate, Dissolved as SO4		390 mg/l				
	Nitrogen : Total Oxidised as N		1.60 mg/l				
	Chloride		2400 mg/l				
	Fluoride		0.25 mg/l				
	Ammoniacal Nitrogen as N		0.04 mg/l				
	Carbon, Organic : Total as C :- {TOC}		2.8 mg/l				
	pH		7.30 pH Units				

BH12	Aluminium, Dissolved		15 µg/l		04/012/2019	Sampling Amec/Testing EA NLS	
	Antimony, Dissolved		<1 µg/l				
	Arsenic Dissolved		<1 µg/l				
	Boron, Dissolved		6 µg/l				
	Cadmium, Dissolved		<0.1 µg/l				
	Calcium, Dissolved		140 mg/l				
	Chromium, Dissolved		<0.5 µg/l				
	Copper, Dissolved		1.20 µg/l				
	Magnesium, Dissolved		26 mg/l				
	Manganese, Dissolved		33 µg/l				
	Molybdenum, Dissolved		3 µg/l				
	Nickel, Dissolved		1.1 µg/l				
	Selenium Dissolved		0.00 µg/l				
	Vanadium, Dissolved		<2 µg/l				
	Zinc, Dissolved		2 µg/l				
	Mercury, Dissolved		99 µg/l				
	Alkalinity to pH 4.5 as CaCO3		330 mg/l				
	Conductivity at 20C		1400 uS/cm				
	Potassium, Dissolved		<10 mg/l				
	Sodium, Dissolved		7 mg/l				
	Sulphate, Dissolved as SO4		200 mg/l				
	Nitrogen : Total Oxidised as N		0.58 mg/l				
	Chloride		250 mg/l				
	Fluoride		0.21 mg/l				
	Ammoniacal Nitrogen as N		<0.030 mg/l				
	Carbon, Organic : Total as C :- {TOC}		1.7 mg/l				
	pH		7.50 pH Units				

BH13	Aluminium, Dissolved		<10 µg/l		28/08/2019	Sampling Amec/Testing EA NLS	
	Antimony, Dissolved		<1 µg/l				
	Arsenic Dissolved		<1 µg/l				
	Boron, Dissolved		160 µg/l				
	Cadmium, Dissolved		<0.1 µg/l				
	Calcium, Dissolved		120 mg/l				
	Chromium, Dissolved		<3 µg/l				
	Copper, Dissolved		<1 µg/l				
	Magnesium, Dissolved		51 mg/l				
	Manganese, Dissolved		<10 µg/l				
	Molybdenum, Dissolved		<3 µg/l				
	Nickel, Dissolved		2.0 µg/l				
	Selenium Dissolved		0.00 µg/l				
	Vanadium, Dissolved		<2 µg/l				
	Zinc, Dissolved		6 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		310 mg/l				
	Conductivity at 20C		1900 uS/cm				
	Potassium, Dissolved		8 mg/l				
	Sodium, Dissolved		240 mg/l				
	Sulphate, Dissolved as SO4		150 mg/l				
	Nitrogen : Total Oxidised as N		<0.20 mg/l				
	Chloride		410 mg/l				
	Fluoride		0.19 mg/l				
	Ammoniacal Nitrogen as N		<0.030 mg/l				
	Carbon, Organic : Total as C :- {TOC}		1.7 mg/l				
	pH		8.10 pH Units				

BH13	Aluminium, Dissolved		15 µg/l		04/012/2019	Sampling Amec/Testing EA NLS	
	Antimony, Dissolved		<1 µg/l				
	Arsenic Dissolved		<1 µg/l				
	Boron, Dissolved		140 µg/l				
	Cadmium, Dissolved		<0.1 µg/l				
	Calcium, Dissolved		89 mg/l				
	Chromium, Dissolved		<0.5 µg/l				
	Copper, Dissolved		1.10 µg/l				
	Magnesium, Dissolved		33 mg/l				
	Manganese, Dissolved		<10 µg/l				
	Molybdenum, Dissolved		3 µg/l				
	Nickel, Dissolved		1.6 µg/l				
	Selenium Dissolved		0.00 µg/l				
	Vanadium, Dissolved		<2 µg/l				
	Zinc, Dissolved		6 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		330 mg/l				
	Conductivity at 20C		1400 uS/cm				
	Potassium, Dissolved		7 mg/l				
	Sodium, Dissolved		200 mg/l				
	Sulphate, Dissolved as SO4		99 mg/l				
	Nitrogen : Total Oxidised as N		0.58 mg/l				
	Chloride		250 mg/l				
	Fluoride		0.21 mg/l				
	Ammoniacal Nitrogen as N		<0.030 mg/l				
	Carbon, Organic : Total as C :- {TOC}		1.7 mg/l				
	pH		7.50 pH Units				

[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 …… Date 14/02/2020 (authorised to sign as representative of the Operator)