

Reporting of Emission to Groundwater for the period from ...1st January 2019....to...30th June 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		12/02/2019	Sampling Amec/Testing EA NLS	
	Antimony, Dissolved		<1 µg/l				
	Arsenic Dissolved		<1 µg/l				
	Boron, Dissolved		188 µg/l				
	Cadmium, Dissolved		<0.1 µg/l				
	Calcium, Dissolved		99 mg/l				
	Chromium, Dissolved		<0.5 µg/l				
	Copper, Dissolved		1.35 µg/l				
	Magnesium, Dissolved		17 mg/l				
	Manganese, Dissolved		<10 µg/l				
	Molybdenum, Dissolved		6 µg/l				
	Nickel, Dissolved		<1 µg/l				
	Selenium Dissolved		<1 µg/l				
	Vanadium, Dissolved		<2 µg/l				
	Zinc, Dissolved		6 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO ₃		313 mg/l				
	Conductivity at 20C		927 uS/cm				
	Potassium, Dissolved		8 mg/l				
	Sodium, Dissolved		89 mg/l				
	Sulphate, Dissolved as SO ₄		62 mg/l				
Nitrogen : Total Oxidised as N		2.35 mg/l					
Chloride		105 mg/l					
Fluoride		0.19 mg/l					
Ammoniacal Nitrogen as N		<0.03 mg/l					
Carbon, Organic : Total as C :- {TOC}		2.9 mg/l					
pH		7.41 pH Units					

BH12	Aluminium, Dissolved		<10 µg/l		29/05/2019	Sampling Amec/Testing EA NLS	
	Antimony, Dissolved		<1 µg/l				
	Arsenic Dissolved		<1 µg/l				
	Boron, Dissolved		148 µg/l				
	Cadmium, Dissolved		<0.1 µg/l				
	Calcium, Dissolved		97 mg/l				
	Chromium, Dissolved		<0.5 µg/l				
	Copper, Dissolved		<1 µg/l				
	Magnesium, Dissolved		40 mg/l				
	Manganese, Dissolved		<10 µg/l				
	Molybdenum, Dissolved		<3 µg/l				
	Nickel, Dissolved		1.1 µg/l				
	Selenium Dissolved		µg/l				
	Vanadium, Dissolved		<2 µg/l				
	Zinc, Dissolved		<5 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		300 mg/l				
	Conductivity at 20C		1660 uS/cm				
	Potassium, Dissolved		8 mg/l				
	Sodium, Dissolved		217 mg/l				
	Sulphate, Dissolved as SO4		124 mg/l				
	Nitrogen : Total Oxidised as N		<0.200 mg/l				
	Chloride		298 mg/l				
	Fluoride		0.20 mg/l				
	Ammoniacal Nitrogen as N		0.04 mg/l				
Carbon, Organic : Total as C :- {TOC}		1.7 mg/l					
pH		7.40 pH Units					

BH13	Aluminium, Dissolved		<10 µg/l		12/02/2019	Sampling Amec/Testing EA NLS	
	Antimony, Dissolved		<1 µg/l				
	Arsenic Dissolved		<1 µg/l				
	Boron, Dissolved		137 µg/l				
	Cadmium, Dissolved		<0.1 µg/l				
	Calcium, Dissolved		75 mg/l				
	Chromium, Dissolved		<0.5 µg/l				
	Copper, Dissolved		1.10 µg/l				
	Magnesium, Dissolved		19 mg/l				
	Manganese, Dissolved		<10 µg/l				
	Molybdenum, Dissolved		6 µg/l				
	Nickel, Dissolved		<1 µg/l				
	Selenium Dissolved		<1 µg/l				
	Vanadium, Dissolved		<2 µg/l				
	Zinc, Dissolved		<5 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		312 mg/l				
	Conductivity at 20C		995 uS/cm				
	Potassium, Dissolved		7 mg/l				
	Sodium, Dissolved		126 mg/l				
	Sulphate, Dissolved as SO4		58 mg/l				
	Nitrogen : Total Oxidised as N		2.02 mg/l				
	Chloride		131 mg/l				
	Fluoride		0.18 mg/l				
	Ammoniacal Nitrogen as N		<0.03 mg/l				
	Carbon, Organic : Total as C :- {TOC}		7.9 mg/l				
pH		7.46 pH Units					

BH13	Aluminium, Dissolved		<10 µg/l		29/05/2019	Sampling Amec/Testing EA NLS	
	Antimony, Dissolved		<1 µg/l				
	Arsenic Dissolved		<1 µg/l				
	Boron, Dissolved		148 µg/l				
	Cadmium, Dissolved		<0.1 µg/l				
	Calcium, Dissolved		97 mg/l				
	Chromium, Dissolved		<0.5 µg/l				
	Copper, Dissolved		<1 µg/l				
	Magnesium, Dissolved		40 mg/l				
	Manganese, Dissolved		<10 µg/l				
	Molybdenum, Dissolved		<3 µg/l				
	Nickel, Dissolved		1.1 µg/l				
	Selenium Dissolved		µg/l				
	Vanadium, Dissolved		<2 µg/l				
	Zinc, Dissolved		<5 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		300 mg/l				
	Conductivity at 20C		1660 µS/cm				
	Potassium, Dissolved		8 mg/l				
	Sodium, Dissolved		217 mg/l				
	Sulphate, Dissolved as SO4		124 mg/l				
	Nitrogen : Total Oxidised as N		<0.200 mg/l				
	Chloride		298 mg/l				
Fluoride		0.20 mg/l					
Ammoniacal Nitrogen as N		0.04 mg/l					
Carbon, Organic : Total as C :- {TOC}		1.7 mg/l					
pH		7.40 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.

R. T. Powell

Signed Date 27/07/2019

(authorised to sign as representative of the Operator)