Reporting of Emission to Groundwater for the period of June 2024

Operator: CCR Energy Ltd **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		24/06/2024	Sampling WSP / Testing ALS	
	Antimony, Dissolved		<1 µg/L				
	Arsenic, Dissolved		<0.5 µg/L				
	Boron, Dissolved		126 µg/L				
	Cadmium, Dissolved		<0.08 µg/L				
	Calcium, Dissolved		99500 µg/L				
	Chromium, Dissolved		<1 µg/L				
	Hexavalent Chromium		<30 µg/L				
	Copper, Dissolved		1.04 µg/L				
	Magnesium, Dissolved		14300 µg/L				
	Manganese. Dissolved		6.44 µg/L				
	Molybdenum, Dissolved		<3 µg/L				
	Nickel, Dissolved		0.792 µg/L				
	Selenium Dissolved		1.62 µg/L				
	Vanadium, Dissolved		<1 µg/L				

	Mercury, Dissolved		<0.01 µg/L				
	Alkalinity to pH 4.5 as $CaCO_3$		307000 µg/L				
	Potassium, Dissolved		5870 µg/L				
	Sulphate, Dissolved as SO_4		43200 µg/L				
	Nitrogen: Total Oxidised as N		2600 µg/L				
	Chloride		69200 µg/L				
	Fluoride		<500 µg/L				
	Ammoniacal Nitrogen as N		<200 µg/L				
	Carbon, Organic: Total as C		7220 µg/L				
	Electrical conductivity		873 µS/cm	Field measurements			
	Temperature		16.4 °C				
	Dissolved oxygen		1.66 mg/L				
	pH		7.08				
	Oxidation reduction potential		111 mV				
	Groundwater level		3.11 mAOD				

Emission Point	Substance / Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
BH13	Aluminium, Dissolved		<10 µg/L		24/06/2024	Sampling WSP / Testing ALS	
	Antimony, Dissolved		<1 µg/L				
	Arsenic, Dissolved		<0.5 µg/L				
	Boron, Dissolved		111 µg/L				
	Cadmium, Dissolved		<0.08 µg/L				
	Calcium, Dissolved		88100 µg/L				
	Chromium, Dissolved		<1 µg/L				
	Copper, Dissolved		0.752 µg/L				
	Magnesium, Dissolved		15200 µg/L				
	Manganese. Dissolved		8.79 µg/L				
	Molybdenum, Dissolved		<3 µg/L				
	Nickel, Dissolved		3.02 µg/L				
	Selenium Dissolved		1.11 µg/L				
	Vanadium, Dissolved		<1 µg/L				
	Mercury, Dissolved		<0.01 µg/L				
	Alkalinity to pH 4.5 as $CaCO_3$		302000 µg/L				
	Potassium, Dissolved		5560 µg/L				
	Sulphate, Dissolved as SO_4		56600 µg/L				
	Nitrogen: Total Oxidised as N		1720 µg/L				

	Chloride		79300 µg/L				
	Fluoride		<500 µg/L				
	Ammoniacal Nitrogen as N		<200 µg/L				
	Carbon, Organic: Total as C		<3000 µg/L				
	Electrical conductivity		905 µS/cm	Field measurements			
	Temperature		16.4 °C				
	Dissolved oxygen		1.85 mg/L				
	pH		7.17				
	Oxidation reduction potential		81 mV				
	Groundwater level		3.03 mAOD				

[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.

Signed[redacted]……. Date……15/07/2024……..
(authorised to sign as representative of the Operator)