

Reporting of Emission to Groundwater for the period of January 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		04/10/2023	Sampling WSP / Testing ALS	
	Antimony, Dissolved		<1				
	Arsenic, Dissolved		0.556 µg/L				
	Boron, Dissolved		171 µg/L				
	Cadmium, Dissolved		<0.08 µg/L				
	Calcium, Dissolved		121000 µg/L				
	Chromium, Dissolved		<1 µg/L				
	Hexavalent Chromium		<30 µg/L				
	Copper, Dissolved		1.17 µg/L				
	Magnesium, Dissolved		16100 µg/L				
	Manganese, Dissolved		<3 µg/L				
	Molybdenum, Dissolved		3.37 µg/L				
	Nickel, Dissolved		0.873 µg/L				
	Selenium Dissolved		3.31 µg/L				

Vanadium, Dissolved		<1 µg/L				
Mercury, Dissolved		0.0708 µg/L				
Alkalinity to pH 4.5 as CaCO ₃		331000 µg/L				
Potassium, Dissolved		6570 µg/L				
Sulphate, Dissolved as SO ₄		63600 µg/L				
Nitrogen: Total Oxidised as N		2780 µg/L				
Chloride		96400 µg/L				
Fluoride		<500 µg/L				
Ammoniacal Nitrogen as N		<200 µg/L				
Carbon, Organic: Total as C		<3000 µg/L				
Electrical conductivity		1017 µS/cm		Field measure ments		
Temperature		10.2 °C				
Dissolved oxygen		2.12 mg/L				
pH		7.05				
Oxidation reduction potential		107 mV				
Groundwater level		4.37 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		04/10/2023	Sampling WSP / Testing ALS	
	Antimony, Dissolved		<1 µg/L				
	Arsenic, Dissolved		<0.5 µg/L				
	Boron, Dissolved		132 µg/L				
	Cadmium, Dissolved		<0.08 µg/L				
	Calcium, Dissolved		85700 µg/L				
	Chromium, Dissolved		<1 µg/L				
	Copper, Dissolved		0.916 µg/L				
	Magnesium, Dissolved		14800 µg/L				
	Manganese, Dissolved		<3 µg/L				
	Molybdenum, Dissolved		9.55 µg/L				
	Nickel, Dissolved		0.74 µg/L				
	Selenium Dissolved		1.42 µg/L				
	Vanadium, Dissolved		<1 µg/L				
	Mercury, Dissolved		<0.01 µg/L				
	Alkalinity to pH 4.5 as CaCO ₃		293000 µg/L				
	Potassium, Dissolved		5120 µg/L				
Sulphate, Dissolved as SO ₄		41400 µg/L					
Nitrogen: Total Oxidised as N		2750 µg/L					

	Chloride		100000 µg/L				
	Fluoride		<500 µg/L				
	Ammoniacal Nitrogen as N		<200 µg/L				
	Carbon, Organic: Total as C		<3000 µg/L				
	Electrical conductivity		928 µS/cm	Field measure ments			
	Temperature		10.5 °C				
	Dissolved oxygen		1.44 mg/L				
	pH		7.19				
	Oxidation reduction potential		74 mV				
	Groundwater level		5.32 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
(authorised to sign as representative of the Operator)

Date.....16/02/2024.....