

Reporting of Emission to Groundwater for the period of September 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		10/09/2024	Sampling WSP / Testing ALS	
	Antimony, Dissolved		<1 µg/L				
	Arsenic, Dissolved		0.61 µg/L				
	Boron, Dissolved		214 µg/L				
	Cadmium, Dissolved		<0.08 µg/L				
	Calcium, Dissolved		104000 µg/L				
	Chromium, Dissolved		<1 µg/L				
	Hexavalent Chromium		<30 µg/L				
	Copper, Dissolved		0.678 µg/L				
	Magnesium, Dissolved		19200 µg/L				
	Manganese, Dissolved		13.3 µg/L				
	Molybdenum, Dissolved		<3 µg/L				
	Nickel, Dissolved		1.09 µg/L				
	Selenium Dissolved		2.43 µg/L				
Vanadium, Dissolved		<1 µg/L					

Mercury, Dissolved		<0.01 µg/L				
Alkalinity to pH 4.5 as CaCO ₃		320000 µg/L				
Potassium, Dissolved		8380 µg/L				
Sulphate, Dissolved as SO ₄		65300 µg/L				
Nitrogen: Total Oxidised as N		2900 µg/L				
Chloride		175000 µg/L				
Fluoride		<500 µg/L				
Ammoniacal Nitrogen as N		<200 µg/L				
Carbon, Organic: Total as C		<3000 µg/L				
Electrical conductivity		1239 µS/cm		Field measure ments		
Temperature		16.0 °C				
Dissolved oxygen		3.28 mg/L				
pH		7.10				
Oxidation reduction potential		37 mV				
Groundwater level		2.76 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		10/09/2024	Sampling WSP / Testing ALS	
	Antimony, Dissolved		<1 µg/L				
	Arsenic, Dissolved		0.517 µg/L				
	Boron, Dissolved		298 µg/L				
	Cadmium, Dissolved		<0.08 µg/L				
	Calcium, Dissolved		98800 µg/L				
	Chromium, Dissolved		<1 µg/L				
	Copper, Dissolved		1.11 µg/L				
	Magnesium, Dissolved		14200 µg/L				
	Manganese, Dissolved		18 µg/L				
	Molybdenum, Dissolved		11.1 µg/L				
	Nickel, Dissolved		1.27 µg/L				
	Selenium Dissolved		3.75 µg/L				
	Vanadium, Dissolved		<1 µg/L				
	Mercury, Dissolved		<0.01 µg/L				
	Alkalinity to pH 4.5 as CaCO ₃		315000 µg/L				
	Potassium, Dissolved		6580 µg/L				
	Sulphate, Dissolved as SO ₄		65400 µg/L				
Nitrogen: Total Oxidised as N		634 µg/L					

	Chloride		38300 µg/L				
	Fluoride		<500 µg/L				
	Ammoniacal Nitrogen as N		<200 µg/L				
	Carbon, Organic: Total as C		3510 µg/L				
	Electrical conductivity		798 µS/cm	Field measure ments			
	Temperature		16.3 °C				
	Dissolved oxygen		3.37 mg/L				
	pH		7.13				
	Oxidation reduction potential		39 mV				
	Groundwater level		3.38 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.....03/10/2024.....