Reporting of Emission to Surface Water for the period of September 2024

Operator: CCR Energy Ltd **Form: Water1**

Location: Aberthaw Ash Disposal Site

Permit/Variation Number: DP3432SW

Emission Point	Substance / Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
S1 (Group Five Spring)	Aluminium, Dissolved		<10 µg/L		10/09/2024	Sampling WSP / Testing ALS	
	Antimony, Dissolved		1.3 µg/L				
	Arsenic, Dissolved		7.4 µg/L				
	Boron, Dissolved		6820 µg/L				
	Cadmium, Dissolved		0.139 µg/L				
	Calcium, Dissolved		605000 µg/L				
	Chromium, Dissolved		<1 µg/L				
	Copper, Dissolved		<0.3 µg/L				
	Manganese. Dissolved		315 µg/L				
	Molybdenum, Dissolved		1380 µg/L				
	Nickel, Dissolved		0.759 µg/L				
	Selenium Dissolved		6.33 µg/L				
	Vanadium, Dissolved		5.99 µg/L				
	Mercury, Dissolved		<0.01 µg/L				
	Alkalinity to pH 4.5 as $CaCO_3$		154000 µg/L				
	Potassium, Dissolved		122000 µg/L				
	Sodium, Dissolved		1350000 µg/L				
	Sulphate, Dissolved as SO_4		0.908 g/L				
	Nitrogen: Total Oxidised as N		1940 µg/L				
	Chloride		2920000 µg/L				
	Fluoride		<500 µg/L				
	Ammoniacal Nitrogen as NH_3		869 µg/L				
	Carbon, Organic: Total as C		17600 µg/L				
	Electrical conductivity		23018 µS/cm	Field measurements			
	Temperature		16.2 °C				
	Dissolved oxygen		5.76 mg/L				

Emission Point	Substance / Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
	pH		6.45				
	Oxidation reduction potential		-248 mV				

Emission Point	Substance / Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
Eastern Perimeter Drain	Aluminium, Dissolved		Sampling point dry – no samples taken		10/09/2024	Sampling WSP / Testing ALS	
	Antimony, Dissolved						
	Arsenic, Dissolved						
	Boron, Dissolved						
	Cadmium, Dissolved						
	Calcium, Dissolved						
	Chromium, Dissolved						
	Copper, Dissolved						
	Manganese. Dissolved						
	Molybdenum, Dissolved						
	Nickel, Dissolved						
	Selenium Dissolved						
	Vanadium, Dissolved						
	Mercury, Dissolved						
	Alkalinity to pH 4.5 as $CaCO_3$						
	Potassium, Dissolved						
	Sodium, Dissolved						
	Sulphate, Dissolved as SO_4						
	Nitrogen: Total Oxidised as N						
	Chloride						
	Fluoride						
	Ammoniacal Nitrogen as NH_3						
	Carbon, Organic: Total as C						
	Electrical conductivity			Field measurements			
	Temperature						
	Dissolved oxygen						

Emission Point	Substance / Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
	pH						
	Oxidation reduction potential						

Emission Point	Substance / Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
S3 (River Thaw)	Aluminium, Dissolved		<10 µg/L		10/09/2024	Sampling WSP / Testing ALS	
	Antimony, Dissolved		<1 µg/L				
	Arsenic, Dissolved		0.766 µg/L				
	Boron, Dissolved		78 µg/L				
	Cadmium, Dissolved		<0.08 µg/L				
	Calcium, Dissolved		105000 µg/L				
	Chromium, Dissolved		<1 µg/L				
	Copper, Dissolved		1.19 µg/L				
	Manganese. Dissolved		19.4 µg/L				
	Molybdenum, Dissolved		<3 µg/L				
	Nickel, Dissolved		0.927 µg/L				
	Selenium Dissolved		<1 µg/L				
	Vanadium, Dissolved		<1 µg/L				
	Mercury, Dissolved		<0.01 µg/L				
	Alkalinity to pH 4.5 as $CaCO_3$		261000 µg/L				
	Potassium, Dissolved		3940 µg/L				
	Sodium, Dissolved		42600 µg/L				
	Sulphate, Dissolved as SO_4		0.0356 g/L				
	Nitrogen: Total Oxidised as N		3560 µg/L				
	Chloride		80000 µg/L				
	Fluoride		<500 µg/L				
	Ammoniacal Nitrogen as NH_3		<200 µg/L				
	Carbon, Organic: Total as C		4960 µg/L				
	Electrical conductivity		793 µS/cm	Field measurements			
	Temperature		14.0 °C				
	Dissolved oxygen		9.25 mg/L				
	pH		7.93				
	Oxidation reduction potential		71 mV				

Emission Point	Substance / Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
Brackish Lagoon	Aluminium, Dissolved		950 µg/L		10/09/2024	Sampling WSP / Testing ALS	
	Antimony, Dissolved		<20 µg/L				
	Arsenic, Dissolved		<10 µg/L				
	Boron, Dissolved		7770 µg/L				
	Cadmium, Dissolved		<1.6 µg/L				
	Calcium, Dissolved		443000 µg/L				
	Chromium, Dissolved		<20 µg/L				
	Copper, Dissolved		<6 µg/L				
	Manganese. Dissolved		278 µg/L				
	Molybdenum, Dissolved		930 µg/L				
	Nickel, Dissolved		<8 µg/L				
	Selenium Dissolved		<20 µg/L				
	Vanadium, Dissolved		<20 µg/L				
	Mercury, Dissolved		<0.01 µg/L				
	Alkalinity to pH 4.5 as $CaCO_3$		122000 µg/L				
	Potassium, Dissolved		292000 µg/L				
	Sodium, Dissolved		6410000 µg/L				
	Sulphate, Dissolved as SO_4		2.01 g/L				
	Nitrogen: Total Oxidised as N		<100 µg/L				
	Chloride		12500000 µg/L				
	Fluoride		590 µg/L				
	Ammoniacal Nitrogen as NH_3		<200 µg/L				
	Carbon, Organic: Total as C		7330 µg/L				
	Electrical conductivity		35648 µS/cm	Field measurements			
	Temperature		19.7 °C				
	Dissolved oxygen		4.86 mg/L				
	pH		7.61				
	Oxidation reduction potential		24 mV				

[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 …… …… Date……18/06/2024……
(authorised to sign as representative of the Operator)