Reporting of Emission to Surface Water for the period of June 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		03/07/2024	Sampling WSP / Testing ALS	
	Antimony, Dissolved		5.93 µg/L				
	Arsenic, Dissolved		20.6 µg/L				
	Boron, Dissolved		11200 µg/L				
	Cadmium, Dissolved		0.481 µg/L				
	Calcium, Dissolved		953000 µg/L				
	Chromium, Dissolved		<1 µg/L				
	Copper, Dissolved		<0.3 µg/L				
	Manganese. Dissolved		182 µg/L				
	Molybdenum, Dissolved		4950 µg/L				
	Nickel, Dissolved		0.647 µg/L				
	Selenium Dissolved		27.1 µg/L				
	Vanadium, Dissolved		39.9 µg/L				
	Mercury, Dissolved		<0.01 µg/L				
	Alkalinity to pH 4.5 as $CaCO_3$		164000 µg/L				
	Potassium, Dissolved		186000 µg/L				
	Sodium, Dissolved		2260000 µg/L				
	Sulphate		1590000 µg/L				
	Nitrogen: Total Oxidised as N		2520 µg/L				
	Chloride		5910000 µg/L				
	Fluoride		<500 µg/L				
	Ammoniacal Nitrogen as NH_3		771 µg/L				
	Carbon, Organic: Total as C		6930 µg/L				
	Electrical conductivity		Field measurements not taken due	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		to access constraints.				
	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]
Eastern Perimeter Drain	Aluminium, Dissolved		Sampling not completed due to sampling location being dry.			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		27/06/2024	Sampling WSP / Testing ALS	
	Antimony, Dissolved		<1 µg/L				
	Arsenic, Dissolved		1.09 µg/L				
	Boron, Dissolved		818 µg/L				
	Cadmium, Dissolved		<0.08 µg/L				
	Calcium, Dissolved		161000 µg/L				
	Chromium, Dissolved		<1 µg/L				
	Copper, Dissolved		0.736 µg/L				
	Manganese. Dissolved		22.4 µg/L				
	Molybdenum, Dissolved		65.1 µg/L				
	Nickel, Dissolved		0.762 µg/L				
	Selenium Dissolved		<1 µg/L				
	Vanadium, Dissolved		<1 µg/L				
	Mercury, Dissolved		<0.01 µg/L				
	Alkalinity to pH 4.5 as $CaCO_3$		248000 µg/L				
	Potassium, Dissolved		72400 µg/L				
	Sodium, Dissolved		1700000 µg/L				
	Sulphate, Dissolved as SO_4		0.527 g/L				
	Nitrogen: Total Oxidised as N		1020 µg/L				
	Chloride		3550000 µg/L				
	Fluoride		<500 µg/L				
	Ammoniacal Nitrogen as NH_3		<200 µg/L				
	Carbon, Organic: Total as C		5640 µg/L				
	Electrical conductivity		10609µS/cm	Field measurements			
	Temperature		17.5 °C				
	Dissolved oxygen		10.49 mg/L				
	pH		7.96				
	Oxidation reduction potential		62 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		<60 µg/L		27/06/2024	Sampling WSP / Testing ALS	
	Antimony, Dissolved		<6 µg/L				
	Arsenic, Dissolved		3.56 µg/L				
	Boron, Dissolved		5850 µg/L				
	Cadmium, Dissolved		<0.48 µg/L				
	Calcium, Dissolved		369000 µg/L				
	Chromium, Dissolved		<6 µg/L				
	Copper, Dissolved		<1.8 µg/L				
	Manganese. Dissolved		49.4 µg/L				
	Molybdenum, Dissolved		1300 µg/L				
	Nickel, Dissolved		<2.4 µg/L				
	Selenium Dissolved		<6 µg/L				
	Vanadium, Dissolved		<6 µg/L				
	Mercury, Dissolved		<0.01 µg/L				
	Alkalinity to pH 4.5 as $CaCO_3$		106000 µg/L				
	Potassium, Dissolved		246000 µg/L				
	Sodium, Dissolved		6020000 µg/L				
	Sulphate, Dissolved as SO_4		1.76 g/L				
	Nitrogen: Total Oxidised as N		<500 µg/L				
	Chloride		10800000 µg/L				
	Fluoride		540 µg/L				
	Ammoniacal Nitrogen as NH_3		<200 µg/L				
	Carbon, Organic: Total as C		6640 µg/L				
	Electrical conductivity		30763 µS/cm	Field measurements			
	Temperature		23.3 °C				
	Dissolved oxygen		5.74 mg/L				
	pH		8.93				
	Oxidation reduction potential		-34 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.

[redacted]

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