

Reporting of Emission to Groundwater for the period from ...1st July 2016..to...31st December 2016...

Operator : RWE Generation UK plc

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		31/08/2016	Sampling Amec/Testing EA NLS	
	Antimony, Dissolved		<1 µg/l				
	Arsenic Dissolved		<1 µg/l				
	Boron, Dissolved		543 µg/l				
	Cadmium, Dissolved		<0.1 µg/l				
	Calcium, Dissolved		238 mg/l				
	Chromium, Dissolved		<0.5 µg/l				
	Copper, Dissolved		1.74 µg/l				
	Magnesium, Dissolved		131 mg/l				
	Manganese, Dissolved		<10 µg/l				
	Molybdenum, Dissolved		5 µg/l				
	Nickel, Dissolved		<1 µg/l				
	Selenium Dissolved		<1 µg/l				
	Vanadium, Dissolved		<2 µg/l				
	Zinc, Dissolved		18 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO ₃		253 mg/l				
	Conductivity at 20C		6410 uS/cm				
	Potassium, Dissolved		37 mg/l				
	Sodium, Dissolved		1020 mg/l				
	Sulphate, Dissolved as SO ₄		319 mg/l				
	Nitrogen : Total Oxidised as N		<2 mg/l				
	Chloride		2030 mg/l				
	Fluoride		0.20 mg/l				
	Ammoniacal Nitrogen as N		<0.3 mg/l				
	Carbon, Organic : Total as C :- {TOC}		1.9 mg/l				
	pH		7.28 pH Units				

BH12	Aluminium, Dissolved			<10 µg/l		
	Antimony, Dissolved			<1 µg/l		
	Arsenic Dissolved			<1 µg/l		
	Boron, Dissolved			311 µg/l		
	Cadmium, Dissolved			<0.1 µg/l		
	Calcium, Dissolved			121 mg/l		
	Chromium, Dissolved			<0.5 µg/l		
	Copper, Dissolved			2.26 µg/l		
	Magnesium, Dissolved			37 mg/l		
	Manganese, Dissolved			<10 µg/l		
	Molybdenum, Dissolved			8 µg/l		
	Nickel, Dissolved			1.0 µg/l		
	Selenium Dissolved			<1 µg/l		
	Vanadium, Dissolved			<2 µg/l		
	Zinc, Dissolved			10 µg/l		
	Mercury, Dissolved			<0.01 µg/l		
	Alkalinity to pH 4.5 as CaCO3			256 mg/l		
	Conductivity at 20C			2100 uS/cm		
	Potassium, Dissolved			17 mg/l		
	Sodium, Dissolved			279 mg/l		
	Sulphate, Dissolved as SO4			151 mg/l		
	Nitrogen : Total Oxidised as N			1.49 mg/l		
	Chloride			467 mg/l		
	Fluoride			0.27 mg/l		
	Ammoniacal Nitrogen as N			0.03 mg/l		
	Carbon, Organic : Total as C :- {TOC}			4.3 mg/l		
	pH			7.56 pH Units		
		23/11/2016				
		Sampling Amec/Testing EA NLS				

BH13	Aluminium, Dissolved		<10 µg/l	31/08/2016	Sampling Amec/Testing EA NLS	
	Antimony, Dissolved		<1 µg/l			
	Arsenic Dissolved		<1 µg/l			
	Boron, Dissolved		245 µg/l			
	Cadmium, Dissolved		<0.1 µg/l			
	Calcium, Dissolved		136 mg/l			
	Chromium, Dissolved		<0.5 µg/l			
	Copper, Dissolved		<1 µg/l			
	Magnesium, Dissolved		42 mg/l			
	Manganese, Dissolved		51 µg/l			
	Molybdenum, Dissolved		5 µg/l			
	Nickel, Dissolved		1.2 µg/l			
	Selenium Dissolved		<1 µg/l			
	Vanadium, Dissolved		<2 µg/l			
	Zinc, Dissolved		<5 µg/l			
	Mercury, Dissolved		<0.01 µg/l			
	Alkalinity to pH 4.5 as CaCO3		266 mg/l			
	Conductivity at 20C		2110 uS/cm			
	Potassium, Dissolved		11 mg/l			
	Sodium, Dissolved		271 mg/l			
	Sulphate, Dissolved as SO4		127 mg/l			
	Nitrogen : Total Oxidised as N		0.53 mg/l			
	Chloride		515 mg/l			
	Fluoride		0.21 mg/l			
	Ammoniacal Nitrogen as N		0.03 mg/l			
	Carbon, Organic : Total as C :- {TOC}		1.9 mg/l			
	pH		7.44 pH Units			

