



Mr A Leakey
PPC Compliance Team
Natural Resources Wales
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CF3 0EY

Your ref:
Our ref: NRW Reporting Forms
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27th July 2017

Dear Mr Leakey

**RWE Generation UK plc, Aberthaw Power Station, Permit Ref. RP3133LD,
DP3432SW, BP3339BH: NRW Reporting Forms**

Please find enclosed the Water1 and Groundwater1 reports for Aberthaw Power Station, Aberthaw Ash Disposal Site and Aberthaw Quarry Ash Disposal Site covering the period 1st January 2017 to 30th June 2017.

Please contact Amy Lavisher on the above telephone number if you have any questions or if clarification is required.

Yours sincerely

Richard Little
Station Manager

RWE Generation

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Registered in England
and Wales no. 3892782

Reporting of Emission to Groundwater for the period from ...1st January 2017..to...30th June 2017...

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		14/02/2017	Sampling Amec/Testing EA NLS	
	Antimony, Dissolved		<1 µg/l				
	Arsenic Dissolved		<1 µg/l				
	Boron, Dissolved		233 µg/l				
	Cadmium, Dissolved		<0.1 µg/l				
	Calcium, Dissolved		115 mg/l				
	Chromium, Dissolved		<0.5 µg/l				
	Copper, Dissolved		1.34 µg/l				
	Magnesium, Dissolved		27 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		10 µg/l				
	Mercury, Dissolved		<0.01 µg/l				
	Alkalinity to pH 4.5 as CaCO3		308 mg/l				
	Conductivity at 20C		1510 uS/cm				
	Potassium, Dissolved		10 mg/l				
	Sodium, Dissolved		183 mg/l				
	Sulphate, Dissolved as SO4		87 mg/l				
	Nitrogen : Total Oxidised as N		2.19 mg/l				
	Chloride		276 mg/l				
	Fluoride		0.15 mg/l				
	Ammoniacal Nitrogen as N		0.03 mg/l				
	Carbon, Organic : Total as C :- {TOC}		2.3 mg/l				
	pH		7.32 pH Units				

BH12	Aluminium, Dissolved		<10 µg/l	11/05/2017	Sampling Amec/Testing EA NLS	
	Antimony, Dissolved		<1 µg/l			
	Arsenic Dissolved		<1 µg/l			
	Boron, Dissolved		220 µg/l			
	Cadmium, Dissolved		<0.1 µg/l			
	Calcium, Dissolved		128 mg/l			
	Chromium, Dissolved		<0.5 µg/l			
	Copper, Dissolved		1.69 µg/l			
	Magnesium, Dissolved		33 mg/l			
	Manganese, Dissolved		<10 µg/l			
	Molybdenum, Dissolved		4 µg/l			
	Nickel, Dissolved		<1 µg/l			
	Selenium Dissolved		<1 µg/l			
	Vanadium, Dissolved		<2 µg/l			
	Zinc, Dissolved		7 µg/l			
	Mercury, Dissolved		<0.01 µg/l			
	Alkalinity to pH 4.5 as CaCO3		301 mg/l			
	Conductivity at 20C		1850 uS/cm			
	Potassium, Dissolved		12 mg/l			
	Sodium, Dissolved		240 mg/l			
	Sulphate, Dissolved as SO4		106 mg/l			
	Nitrogen : Total Oxidised as N		1.49 mg/l			
	Chloride		410 mg/l			
	Fluoride		0.17 mg/l			
	Ammoniacal Nitrogen as N		0.03 mg/l			
	Carbon, Organic : Total as C :- {TOC}		1.7 mg/l			
	pH		7.62 pH Units			

BH13	Aluminium, Dissolved		<10 µg/l	14/02/2017	Sampling Amec/Testing EA NLS	
	Antimony, Dissolved		<1 µg/l			
	Arsenic Dissolved		<1 µg/l			
	Boron, Dissolved		161 µg/l			
	Cadmium, Dissolved		<0.1 µg/l			
	Calcium, Dissolved		91 mg/l			
	Chromium, Dissolved		<0.5 µg/l			
	Copper, Dissolved		<1 µg/l			
	Magnesium, Dissolved		25 mg/l			
	Manganese, Dissolved		12 µg/l			
	Molybdenum, Dissolved		<3 µg/l			
	Nickel, Dissolved		<1 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		295 mg/l			
	Conductivity at 20C		1420 µS/cm			
	Potassium, Dissolved		8 mg/l			
	Sodium, Dissolved		193 mg/l			
	Sulphate, Dissolved as SO4		72 mg/l			
	Nitrogen : Total Oxidised as N		1.52 mg/l			
	Chloride		265 mg/l			
	Fluoride		0.19 mg/l			
	Ammoniacal Nitrogen as N		0.03 mg/l			
	Carbon, Organic : Total as C :- {TOC}		2.0 mg/l			
	pH		7.43 pH Units			

BH13	Aluminium, Dissolved		<10 µg/l			
	Antimony, Dissolved		<1 µg/l			
	Arsenic Dissolved		<1 µg/l			
	Boron, Dissolved		157 µg/l			
	Cadmium, Dissolved		<0.1 µg/l			
	Calcium, Dissolved		94 mg/l			
	Chromium, Dissolved		<0.5 µg/l			
	Copper, Dissolved		1.08 µg/l			
	Magnesium, Dissolved		27 mg/l			
	Manganese, Dissolved		<10 µg/l			
	Molybdenum, Dissolved		4 µg/l			
	Nickel, Dissolved		<1 µg/l			
	Selenium Dissolved		<1 µg/l			
	Vanadium, Dissolved		<2 µg/l			
	Zinc, Dissolved		<5 µg/l			
	Mercury, Dissolved		0 µg/l			
	Alkalinity to pH 4.5 as CaCO3		304 mg/l			
	Conductivity at 20C		1370 uS/cm			
	Potassium, Dissolved		8 mg/l			
	Sodium, Dissolved		181 mg/l			
	Sulphate, Dissolved as SO4		84 mg/l			
	Nitrogen : Total Oxidised as N		0.60 mg/l			
	Chloride		257 mg/l			
	Fluoride		0.18 mg/l			
	Ammoniacal Nitrogen as N		0.09 mg/l			
	Carbon, Organic : Total as C :- {TOC}		1.6 mg/l			
	pH		7.51 pH Units			

Sampling Amec/Testing
EA NLS

11/05/2017

[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.

[6] The emission limit values for all substances is expressed as a maximum individual value, unless otherwise stated.

Signed A. Zawiya Date 27/07/17

(authorised to sign as representative of the Operator)