

Permit Number: RP3133LD Operator: RWE Generation UK plc  
 Installation: Aberthaw Power Station Form Number: Process 1 / 30/11/07  
 Reporting of process monitoring for the period from 01/04/2016 to 30/04/2016

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>
A13 (unit 7 absorber inlet)	Particulate Matter (mg/m <sup>3</sup> ) (maximum hourly average value)	-	Continuous	270		01 - 30/04/16	MCERT monitor
A13 (unit 7 absorber inlet)	Particulate Matter (mg/m <sup>3</sup> ) (monthly average value)	-	Continuous	83.0		01 - 30/04/16	MCERT monitor
A14 (unit 8 absorber inlet)	Particulate Matter (mg/m <sup>3</sup> ) (maximum hourly average value)	-	Continuous	239		01 - 30/03/16	MCERT monitor
A14 (unit 8 absorber inlet)	Particulate Matter (mg/m <sup>3</sup> ) (monthly average value)	-	Continuous	58.4		01 - 30/03/16	MCERT monitor
A15 (unit 9 absorber inlet)	Particulate Matter (mg/m <sup>3</sup> ) (maximum hourly average value)	-	Continuous	106		01 - 30/03/15	MCERT monitor
A15 (unit 9 absorber inlet)	Particulate Matter (mg/m <sup>3</sup> ) (monthly average value)	-	Continuous	33.6		01 - 30/03/15	MCERT monitor

[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. gas chromatography. To be confirmed upon completion of permit improvement condition reference IC20.

[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.

[4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed A. Zambor Date 20/05/2016

(Authorised to sign as representative of Operator)

31 MAY 2016

# Reporting of deposited particulate matter for the period from 01/04/2016 to 02/05/2016

Operator: RWE npower

Form: Deposition1 /30/11/07

Location: Aberthaw

Version: V.6 Nov 2006

Permit/Variation Number: RP3133LD

Monitoring Point	Substance / Parameter	Guidance Value (mg/m <sup>2</sup> /day)	Result <sup>[1]</sup> (mg/m <sup>2</sup> /day)	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Accreditation/ Certification <sup>[4]</sup>	Uncertainty <sup>[5]</sup>
Font-y-gary	Total deposited particulate matter	80-100	19.4	BS 1747-1:1969 and best practice guidelines	Continuous	-	-
East Aberthaw Sidings	Total deposited particulate matter	80-100	58.2	BS 1747-1:1969 and best practice guidelines	Continuous	-	-
Rail Bend	Total deposited particulate matter	80-100	88.9	BS 1747-1:1969 and best practice guidelines	Continuous	-	-
Quarry North	Total deposited particulate matter	80-100	30.1	BS 1747-1:1969 and best practice guidelines	Continuous	-	-
Quarry South	Total deposited particulate matter	80-100	47	BS 1747-1:1969 and best practice guidelines	Continuous	-	-

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[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 A. J. J. J.

(authorised to sign as representative of the Operator)

Date: 20/05/2016

Reporting of Emissions to Water (other than to Sewer) for the period from ...1st April 2016...to...30th April 2016.

Operator: RWE Generation UK plc

Form:

Water1 /25/01/2013

Location: Aberthaw

Version:

V.8 Jan 2013

Permit/Variation Number: EPR/RP3133LD/V006

Emission Point	Substance / Parameter	Emission Limit Value	Result <sup>(1)</sup>	Test Method <sup>(2)</sup>	Sample Date and Times <sup>(3)</sup>	Accreditation/ Certification <sup>(4)</sup>	Uncertainty <sup>(5)</sup>
W1	Total suspended solids	100 mg/l	No release	BS EN 872:2005			
W1	Ammoniacal nitrogen	2 mg/l	No release	BS 6068-2:11			
W1	Cadmium and its compounds, expressed as cadmium (Total Cd)	0.01 mg/l	No release	BS 6068-2:89			
W1	Total hydrocarbon oil	3 mg/l	No release	EN ISO 9377-2			
W1	pH (minimum daily value)	6	No release	BS 6068-2:50:1995			
W1	pH (maximum daily value)	9	No release	BS 6068-2:50:1995			
W1	pH (average daily value)	-	No release	BS 6068-2:50:1995			
W2	Differential total suspended solids	50 mg/l	19.68 mg/l	BS EN 872:2005			
W2	Ammoniacal nitrogen	0,1 mg/l (above background)	0.025 mg/l (above background)	BS6068-2:11			
W2	Differential temperature (rolling 98th percentile)	13.5°C	8.5 °C	ISO, BS EN or SCA Blue Book Method			
W2	Differential temperature (average daily value)	-	2.8 °C	ISO, BS EN or SCA Blue Book Method			
W2	Differential temperature (maximum daily value)	-	10.2 °C	ISO, BS EN or SCA Blue Book Method			
W2	Sulfide	Monitoring method and frequency to be agreed with NRW		Book Method			
W2	Sulfite	Monitoring method and frequency to be agreed with NRW					
W2	Total hydrocarbon oil	3 mg/l	0.200 mg/l	EN ISO 9377-2			
W2	pH (minimum value)	5.6*	5.9	BS 6068-2:50:1995			
W2	pH (maximum 95%ile value)	8.5	7.8	BS 6068-2:50:1995			
W2	pH (minimum 95%ile value)	5.8*	5.9	BS 6068-2:50:1995			
W2	pH (average value)	-	6.3	BS 6068-2:50:1995			

Emission Point	Substance / Parameter	Emission Limit Value	Result <sup>(1)</sup>	Test Method <sup>(2)</sup>	Sample Date and Times <sup>(3)</sup>	Accreditation/ Certification <sup>(4)</sup>	Uncertainty <sup>(5)</sup>
SWTP1	Mercury and its compounds, expressed as mercury (Total Hg) (monthly average of daily samples)	0.0005 mg/l (above background)	0.0006 mg/l** (above background)	BS EN 17852			
SWTP1	Cadmium and its compounds, expressed as cadmium (Total Cd) (monthly average of daily samples)	0.0002 mg/l (above background)	0.00002 mg/l (above background)	BS 6068-2:89			
SWTP2	Mercury and its compounds, expressed as mercury (Total Hg) (monthly average of daily samples)	0.0005 mg/l (above background)	0.0004 mg/l (above background)	BS EN 17852			
SWTP2	Cadmium and its compounds, expressed as cadmium (Total Cd) (monthly average of daily samples)	0.0002 mg/l (above background)	0.00000 mg/l (above background)	BS 6068-2:89			
SWTP3	Mercury and its compounds, expressed as mercury (Total Hg) (monthly average of daily samples)	0.0005 mg/l (above background)	0.0005 mg/l (above background)	BS EN 17852			
SWTP3	Cadmium and its compounds, expressed as cadmium (Total Cd) (monthly average of daily samples)	0.0002 mg/l (above background)	0.00000 mg/l (above background)	BS 6068-2:89			

Emission Point	Substance / Parameter	Emission Limit Value	Result <sup>(1)</sup>	Test Method <sup>(2)</sup>	Sample Date and Times <sup>(3)</sup>	Accreditation/ Certification <sup>(4)</sup>	Uncertainty <sup>(5)</sup>
W2	Dissolved oxygen (minimum value)	-	6.4 mg/l	EN 25814			
W2	Dissolved oxygen (maximum value)	-	13.0 mg/l	EN 25814			
W2	Dissolved oxygen (average value)	-	9.7 mg/l	EN 25814			
SWTP1	pH (average value)	-	3.0	BS 6068-2.50.1995			
SWTP1	Flow (average daily value)	-	16758 m3/h	BS3680			
SWTP1	Flow (Total Monthly Volume)	-	10008982 m3	BS3680			
SWTP1	Arsenic and its compounds, expressed as arsenic (Total As)	-	0.0070 mg/l	BS 6068			
SWTP1	Lead and its compounds, expressed as lead (Total Pb) (monthly average of daily samples)	0.004 mg/l (above background)	0.0054 mg/l** (above background)	BS 6068			
SWTP1	Chromium and its compounds, expressed as chromium (Total Cr-VI)	-	0.0300 mg/l	BS 6068			
SWTP1	Zinc and its compounds, expressed as zinc (Total Zn) (monthly average of daily samples)	0.01 mg/l (above background)	0.020 mg/l*** (above background)	BS 6068			
SWTP1	Selenium and its compounds, expressed as selenium (Total Se)	-	0.0025 mg/l	BS 6068			

Emission Point	Substance / Parameter	Emission Limit Value	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Accreditation/ Certification <sup>[4]</sup>	Uncertainty <sup>[5]</sup>
SWTP2	pH (average value)	-	3.0	BS 6068-2:50:1995			
SWTP2	Flow (average daily value)	-	15700 m3/h	BS3680			
SWTP2	Flow (Total Monthly Volume)	-	11084362 m3	BS3680			
SWTP2	Arsenic and its compounds, expressed as arsenic (Total As)	-	0.0051 mg/l	BS 6068			
SWTP2	Lead and its compounds, expressed as lead (Total Pb) (monthly average of daily samples)	0.004 mg/l (above background)	0.0022 mg/l (above background)	BS 6068			
SWTP2	Chromium and its compounds, expressed as chromium (Total Cr-VI)	-	0.0300 mg/l	BS 6068			
SWTP2	Zinc and its compounds, expressed as zinc (Total Zn) (monthly average of daily samples)	0.01 mg/l (above background)	0.013 mg/l*** (above background)	BS 6068			
SWTP2	Selenium and its compounds, expressed as selenium (Total Se)	-	0.0011 mg/l	BS 6068			

Emission Point	Substance / Parameter	Emission Limit Value	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Accreditation/ Certification <sup>[4]</sup>	Uncertainty <sup>[5]</sup>
SWTP3	pH (average value)	-	2.9	BS 6068-2.50:1995			
SWTP3	Flow (average daily value)	-	17229 m3/h	BS3680			
SWTP3	Flow (Total Monthly Volume)	-	11858200 m3	BS3680			
SWTP3	Arsenic and its compounds, expressed as arsenic (Total As)	-	0.0046 mg/l	BS 6068			
SWTP3	Lead and its compounds, expressed as lead (Total Pb) (monthly average of daily samples)	0.004 mg/l (above background)	0.0026 mg/l (above background)	BS 6068			
SWTP3	Chromium and its compounds, expressed as chromium (Total Cr-VI)	-	0.0300 mg/l	BS 6068			
SWTP3	Zinc and its compounds, expressed as zinc (Total Zn) (monthly average of daily samples)	0.01 mg/l (above background)	0.012 mg/l*** (above background)	BS 6068			
SWTP3	Selenium and its compounds, expressed as selenium (Total Se)	-	0.0022 mg/l	BS 6068			

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[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.

\* pH ELVs amended for trial in agreement with NRW

\*\* Exceedance under investigation

\*\*\* Anomalous results due to CW Inlet sample being a spot sample however results are within historical data range

Signed A. Jander

Date 20/05/2016

(authorised to sign as representative of the Operator)

# Reporting of Surface Water Monitoring for the period from ...1st April 2016...to...30th April 2016.....

Operator: RWE Generation UK plc

Form:

Water2 /25/01/2013

Location: Aberthaw

Version:

V.7 Jan 2013

Permit/Variation Number: EPR/RP3133LD/V006

Emission Point	Substance / Parameter	Emission Limit Value	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Accreditation/ Certification <sup>[4]</sup>	Uncertainty <sup>[5]</sup>
Seawater intake from Bristol Channel	Total suspended solids	-	31.20 mg/l	BS EN 872:2005			
Seawater intake from Bristol Channel	pH (average value)	-	8.0	BS 6068-2.50:1995			
Seawater intake from Bristol Channel	Mercury and its compounds, expressed as mercury (Total Hg)	-	<0.00001 mg/l	BS EN 17852			
Seawater intake from Bristol Channel	Mercury (on filtered sample)	-	<0.00001 mg/l	BS EN 17852			
W2	Mercury and its compounds, expressed as mercury (Total Hg) (monthly cumulative mass)	60kg/yr	14.4 kg	BS EN 17852			

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[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. J. J. J. J.

Date: 2015/2016

(authorised to sign as representative of the Operator)