



Mr A Leahey  
PPC Compliance Team  
Natural Resources Wales  
Rivers House  
St Mellons  
Cardiff  
CF3 0EY

Your ref:  
Our ref: NRW Reporting Forms  
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24<sup>th</sup> August 2017

Dear Mr Leahey,

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

Please find enclosed a series of emissions and monitoring data for July 2017 as required by permit RP3133LD:-

- Process1 – Monthly Reporting of Process Monitoring for FGD Absorber Inlet
- Deposition1 – Monthly Reporting of Deposited Particulate Matter
- Water1 – Monthly Reporting of Emissions to Water (other than to Sewer)
- Water2 – Monthly Reporting of Surface Water Monitoring

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. 3892732

Reporting of Emissions to Water (other than to Sewer) for the period from ...1st July 2017 ...to...31st July 2017.

Operator: RWE Generation UK plc

Form:

Water1 /25/01/2013

Location: Abertthaw

Version:

W 8 Jan 2013

Permit/Variation Number: EPR/RP3133LD

| 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                        | 0.00 mg/l                        | BS EN 872:2005                     |                                      |   |                            |
| W2             | Ammoniacal nitrogen  | 0.1 mg/l<br>(above background) | 0.000 mg/l<br>(above background) | BS6068-2:11                        |                                      |   |                            |
| W2             | Differential temperature (rolling 96th percentile)         | 13.5°C                         | -0.3 °C                          | ISO, BS EN or SCA Blue Book Method |                                      |   |                            |
| W2             | Differential temperature (average daily value)             | -                              | -0.9 °C                          | ISO, BS EN or SCA Blue Book Method |                                      |   |                            |
| W2             | Differential temperature (maximum daily value)             | -                              | 1.6 °C                           | ISO, BS EN or SCA Blue Book Method |                                      |   |                            |
| W2             | Total hydrocarbon oil                                      | 3 mg/l                         | 0.200 mg/l                       | EN ISO 9377-2                      |                                      |   |                            |
| W2             | pH (minimum value)   | 5.6                            | 7.6                              | BS 6068-2:50:1995                  |                                      |   |                            |
| W2             | pH (maximum 95%ile value)                                  | 8.5                            | 8.1                              | BS 6068-2:50:1995                  |                                      |   |                            |
| W2             | pH (minimum 95%ile value)                                  | 5.8                            | 7.6                              | BS 6068-2:50:1995                  |                                      |   |                            |
| W2             | pH (average value)   | -                              | 7.9                              | 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          | Unit Shutdown         | BS EN 17852                |                                      |   |                            |
|                |   | (above background)   |                       |                            |                                      |   |                            |
| SWTP1          | Cadmium and its compounds, expressed as cadmium (Total Cd) (monthly average of daily samples) | 0.0002 mg/l          |                       | BS 6068-2:89               |                                      |   |                            |
|                |   | (above background)   |                       |                            |                                      |   |                            |
| SWTP2          | Mercury and its compounds, expressed as mercury (Total Hg) (monthly average of daily samples) | 0.0005 mg/l          |                       | BS EN 17852                |                                      |   |                            |
|                |   | (above background)   |                       |                            |                                      |   |                            |
| SWTP2          | Cadmium and its compounds, expressed as cadmium (Total Cd) (monthly average of daily samples) | 0.0002 mg/l          |                       | BS 6068-2:89               |                                      |   |                            |
|                |   | (above background)   |                       |                            |                                      |   |                            |
| SWTP3          | Mercury and its compounds, expressed as mercury (Total Hg) (monthly average of daily samples) | 0.0005 mg/l          |                       | BS EN 17852                |                                      |   |                            |
|                |   | (above background)   |                       |                            |                                      |   |                            |
| SWTP3          | Cadmium and its compounds, expressed as cadmium (Total Cd) (monthly average of daily samples) | 0.0002 mg/l          |                       | BS 6068-2:89               |                                      |   |                            |
|                |   | (above background)   |                       |                            |                                      |   |                            |

| 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)  | -                    | 7.8 mg/l              | EN 25814                   |                                      |   |                            |
| W2             | Dissolved oxygen (maximum value)  | -                    | 10.6 mg/l             | EN 25814                   |                                      |   |                            |
| W2             | Dissolved oxygen (average value)  | -                    | 8.6 mg/l              | EN 25814                   |                                      |   |                            |
| SWTP1          | pH (average value)  | -                    | Unit Shutdown         | BS 6068-2.50.1995          |                                      |   |                            |
| SWTP1          | Flow (average daily value)  | -                    |                       | BS3680                     |                                      |   |                            |
| SWTP1          | Flow (Total Monthly Volume)   | -                    |                       | BS3680                     |                                      |   |                            |
| SWTP1          | Arsenic and its compounds, expressed as arsenic (Total As)                              | -                    |                       | BS 6068                    |                                      |   |                            |
| SWTP1          | Lead and its compounds, expressed as lead (Total Pb) (monthly average of daily samples) | 0.004 mg/l           |                       | BS 6068                    |                                      |   |                            |
| SWTP1          | Chromium and its compounds, expressed as chromium (Total Cr VI)                         | -                    | Unit Shutdown         | BS 6068                    |                                      |   |                            |
| SWTP1          | Zinc and its compounds, expressed as zinc (Total Zn) (monthly average of daily samples) | 0.01 mg/l            |                       | BS 6068                    |                                      |   |                            |
| SWTP1          | Selenium and its compounds, expressed as selenium (Total Se)                            | -                    |                       | 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)  | -                                | Unit Shutdown         | BS 6068-2:50:1995          |                                      |   |                            |
| SWTP2          | Flow (average daily value)  | -                                |                       | BS3680                     |                                      |   |                            |
| SWTP2          | Flow (Total Monthly Volume)   | -                                |                       | BS3680                     |                                      |   |                            |
| SWTP2          | Arsenic and its compounds, expressed as arsenic (Total As)                              | -                                |                       | BS 6068                    |                                      |   |                            |
| SWTP2          | Lead and its compounds, expressed as lead (Total Pb) (monthly average of daily samples) | 0.004 mg/l<br>(above background) |                       | BS 6068                    |                                      |   |                            |
| SWTP2          | Chromium and its compounds, expressed as chromium (Total Cr VI)                         | -                                |                       | BS 6068                    |                                      |   |                            |
| SWTP2          | Zinc and its compounds, expressed as zinc (Total Zn) (monthly average of daily samples) | 0.01 mg/l<br>(above background)  |                       | BS 6068                    |                                      |   |                            |
| SWTP2          | Selenium and its compounds, expressed as selenium (Total Se)                            | -                                |                       | 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)  | -                                | Unit Shutdown         | BS 6068-2:50:1995          |                                      |   |                            |
| SWTP3          | Flow (average daily value)  | -                                |                       | BS3680                     |                                      |   |                            |
| SWTP3          | Flow (Total Monthly Volume)   | -                                |                       | BS3680                     |                                      |   |                            |
| SWTP3          | Arsenic and its compounds, expressed as arsenic (Total As)                              | -                                |                       | BS 6068                    |                                      |   |                            |
| SWTP3          | Lead and its compounds, expressed as lead (Total Pb) (monthly average of daily samples) | 0.004 mg/l<br>(above background) |                       | BS 6068                    |                                      |   |                            |
| SWTP3          | Chromium and its compounds, expressed as chromium (Total Cr VI)                         | -                                |                       | BS 6068                    |                                      |   |                            |
| SWTP3          | Zinc and its compounds, expressed as zinc (Total Zn) (monthly average of daily samples) | 0.01 mg/l<br>(above background)  |                       | BS 6068                    |                                      |   |                            |
| SWTP3          | Selenium and its compounds, expressed as selenium (Total Se)                            | -                                |                       | BS 6068                    |                                      |   |                            |

- [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 H. May

Date 23/08/17

(authorised to sign as representative of the Operator)

# Reporting of deposited particulate matter for the period from 03/07/2017 to 01/08/2017

Operator: RWE Generation UK plc

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                                  | 57.2   | BS 1747-1:1969 and best practice guidelines | Continuous                           | -   | -                          |
| East Aberthaw Sidings | Total deposited particulate matter | 80-100                                  | 71   | BS 1747-1:1969 and best practice guidelines | Continuous                           | -   | -                          |
| Rail Bend             | Total deposited particulate matter | 80-100                                  | 89.6   | BS 1747-1:1969 and best practice guidelines | Continuous                           | -   | -                          |
| Quarry North          | Total deposited particulate matter | 80-100                                  | 48.2   | BS 1747-1:1969 and best practice guidelines | Continuous                           | -   | -                          |
| Quarry South          | Total deposited particulate matter | 80-100                                  | 115.4  | BS 1747-1:1969 and best practice guidelines | Continuous                           | -   | -                          |

[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

*H. Ward*

(authorised to sign as representative of the Operator)

Date

*23/08/17*

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 ...

01/07/2017

...to... 31/07/2017

| 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       | Station Shut Down     |                            | 01 - 31/07/17                        | MCERT monitor              |
| A13 (unit 7 absorber inlet) | Particulate Matter (mg/m <sup>3</sup> ) (monthly average value)        | -                    | Continuous       |                       |                            | 01 - 31/07/17                        | MCERT monitor              |
| A14 (unit 8 absorber inlet) | Particulate Matter (mg/m <sup>3</sup> ) (maximum hourly average value) | -                    | Continuous       |                       |                            | 01 - 31/07/17                        | MCERT monitor              |
| A14 (unit 8 absorber inlet) | Particulate Matter (mg/m <sup>3</sup> ) (monthly average value)        | -                    | Continuous       |                       |                            | 01 - 31/07/17                        | MCERT monitor              |
| A15 (unit 9 absorber inlet) | Particulate Matter (mg/m <sup>3</sup> ) (maximum hourly average value) | -                    | Continuous       |                       |                            | 01 - 31/07/17                        | MCERT monitor              |
| A15 (unit 9 absorber inlet) | Particulate Matter (mg/m <sup>3</sup> ) (monthly average value)        | -                    | Continuous       |                       |                            | 01 - 31/07/17                        | MCERT monitor              |

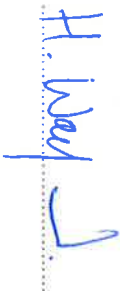
[1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum - 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.

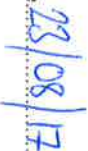
[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.

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

Signed



Date



(Authorised to sign as representative of Operator)

# Reporting of Surface Water Monitoring for the period from ...1st July 2017...to...31st July 2017 .....

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   | -                    | 13.90 mg/l            | BS EN 872:2005             |                                      |   |                            |
| Seawater intake from Bristol Channel | pH (average value)   | -                    | 8.1                   | 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              | 4.1 kg                | BS EN 17852                |                                      |   |                            |

[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

*H. May*

Date

*23/08/17*

(authorised to sign as representative of the Operator)

RP3133LD

1 of 1

Water2