RWE

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

Your ref:
Our ref: NRW Reporting Forms
Phone: 01446 752270
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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

RP

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 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] |
|---|---|---|---|---|---|---|---|
| BH3 | Aluminium, Dissolved | | <40 µg/l | | 14/02/2017 | Sampling Amec/Testing EA NLS | |
| | Antimony, Dissolved | | 14 µg/l | | | | |
| | Arsenic Dissolved | 310 | 179 µg/l | | | | |
| | Boron, Dissolved | 60000 | 21000 µg/l | | | | |
| | Cadmium, Dissolved | 15 | 0.05 µg/l | | | | |
| | Calcium, Dissolved | | 419 mg/l | | | | |
| | Chromium, Dissolved | | <0.5 µg/l | | | | |
| | Copper, Dissolved | | 1.55 µg/l | | | | |
| | Magnesium, Dissolved | | 203 mg/l | | | | |
| | Manganese, Dissolved | | 96 µg/l | | | | |
| | Molybdenum, Dissolved | 9000 | 2410 µg/l | | | | |
| | Nickel, Dissolved | | 0.6 µg/l | | | | |
| | Selenium Dissolved | 350 | 8.45 µg/l | | | | |
| | Vanadium, Dissolved | | 42 µg/l | | | | |
| | Mercury, Dissolved | 20 | <0.01 µg/l | | | | |
| | Alkalinity to pH 4.5 as CaCO3 | | 225 mg/l | | | | |
| | Conductivity at 20C | | 6190 uS/cm | | | | |
| | Potassium, Dissolved | | 108 mg/l | | | | |
| | Sodium, Dissolved | | 768 mg/l | | | | |
| | Sulphate, Dissolved as SO4 | | 1650 mg/l | | | | |
| | Nitrogen : Total Oxidised as N | | 0.84 mg/l | | | | |
| | Chloride | | 1280 mg/l | | | | |
| | Fluoride | | <0.05 mg/l | | | | |
| | Ammoniacal Nitrogen as N | 6.6 | 0.05 mg/l | | | | |
| | Carbon, Organic : Total as C :- {TOC} | | 1 mg/l | | | | |
| | pH | | 7.67 pH Units | | | | |
| | Ionic Balance | | 0.82 % | | | | |
| | Electrical Conductivity | | 7050 µS/cm | Field Measurements | | | |
| | Temperature | | 12.2 deg C | | | | |
| | Dissolved Oxygen | | 1.19 mg/l | | | | |
| | pH | | 7.63 pH Units | | | | |
| | Groundwater Level | | 6.72 mAOD | | | | |

| Emission point | Substance/ Parameter | Emission Limit Value | Result [1] | Test Method [2] | Sample Date and Times [3] | Accreditation/ Certification [4] | Uncertainty [5] |
|---|---|---|---|---|---|---|---|
| BH3 | Aluminium, Dissolved | | <40 µg/l | | 09/05/2017 | Sampling Amec/Testing EA NLS | |
| | Antimony, Dissolved | | 13 µg/l | | | | |
| | Arsenic Dissolved | 310 | 167 µg/l | | | | |
| | Boron, Dissolved | 60000 | 24100 µg/l | | | | |
| | Cadmium, Dissolved | 15 | 0.06 µg/l | | | | |
| | Calcium, Dissolved | | 384 mg/l | | | | |
| | Chromium, Dissolved | | <0.5 µg/l | | | | |
| | Copper, Dissolved | | 2.86 µg/l | | | | |
| | Magnesium, Dissolved | | 202 mg/l | | | | |
| | Manganese, Dissolved | | 87 µg/l | | | | |
| | Molybdenum, Dissolved | 9000 | 2220 µg/l | | | | |
| | Nickel, Dissolved | | <0.3 µg/l | | | | |
| | Selenium Dissolved | 350 | 7.74 µg/l | | | | |
| | Vanadium, Dissolved | | 46 µg/l | | | | |
| | Mercury, Dissolved | 20 | <0.01 µg/l | | | | |
| | Alkalinity to pH 4.5 as CaCO3 | | 240 mg/l | | | | |
| | Conductivity at 20C | | 4920 uS/cm | | | | |
| | Potassium, Dissolved | | 93 mg/l | | | | |
| | Sodium, Dissolved | | 567 mg/l | | | | |
| | Sulphate, Dissolved as SO4 | | 1690 mg/l | | | | |
| | Nitrogen : Total Oxidised as N | | 0.74 mg/l | | | | |
| | Chloride | | 854 mg/l | | | | |
| | Fluoride | | 0.06 mg/l | | | | |
| | Ammoniacal Nitrogen as N | 6.6 | <0.01 mg/l | | | | |
| | Carbon, Organic : Total as C :- {TOC} | | <0.7 mg/l | | | | |
| | pH | | 7.77 pH Units | | | | |
| | Ionic Balance | | 1.02 % | | | | |
| | Electrical Conductivity | | 5054 µS/cm | Field Measurements | | | |
| | Temperature | | 12.1 deg C | | | | |
| | Dissolved Oxygen | | 5.84 mg/l | | | | |
| | pH | | 7.62 pH Units | | | | |
| | Groundwater Level | | 6.21 mAOD | | | | |

| Emission point | Substance/ Parameter | Emission Limit Value | Result [1] | Test Method [2] | Sample Date and Times [3] | Accreditation/ Certification [4] | Uncertainty [5] |
|---|---|---|---|---|---|---|---|
| BH5 | Aluminium, Dissolved | | <10 µg/l | | 15/02/2017 | Sampling Amec/Testing EA NLS | |
| | Antimony, Dissolved | | <1 µg/l | | | | |
| | Arsenic Dissolved | | <1 µg/l | | | | |
| | Boron, Dissolved | | 605 µg/l | | | | |
| | Cadmium, Dissolved | | <0.1 µg/l | | | | |
| | Calcium, Dissolved | | 249 mg/l | | | | |
| | Chromium, Dissolved | | <0.5 µg/l | | | | |
| | Copper, Dissolved | | 1.63 µg/l | | | | |
| | Magnesium, Dissolved | | 18 mg/l | | | | |
| | Manganese, Dissolved | | <10 µg/l | | | | |
| | Molybdenum, Dissolved | | <3 µg/l | | | | |
| | Nickel, Dissolved | | <1 µg/l | | | | |
| | Selenium Dissolved | | <1 µg/l | | | | |
| | Vanadium, Dissolved | | <2 µg/l | | | | |
| | Mercury, Dissolved | | <0.01 µg/l | | | | |
| | Alkalinity to pH 4.5 as CaCO3 | | 376 mg/l | | | | |
| | Conductivity at 20C | | 1270 uS/cm | | | | |
| | Potassium, Dissolved | | 2 mg/l | | | | |
| | Sodium, Dissolved | | 43 mg/l | | | | |
| | Sulphate, Dissolved as SO4 | | 298 mg/l | | | | |
| | Nitrogen : Total Oxidised as N | | 1.25 mg/l | | | | |
| | Chloride | | 67 mg/l | | | | |
| | Fluoride | | 0.08 mg/l | | | | |
| | Ammoniacal Nitrogen as N | | 0.03 mg/l | | | | |
| | Carbon, Organic : Total as C :- {TOC} | | 2 mg/l | | | | |
| | pH | | 6.98 pH Units | | | | |
| | Ionic Balance | | 0.38 % | | | | |
| | Electrical Conductivity | | 1521 µS/cm | Field Measurements | | | |
| | Temperature | | 10.3 deg C | | | | |
| | Dissolved Oxygen | | 5.14 mg/l | | | | |
| | pH | | 6.94 pH Units | | | | |
| | Groundwater Level | | 9.60 mAOD | | | | |

| Emission point | Substance/ Parameter | Emission Limit Value | Result [1] | Test Method [2] | Sample Date and Times [3] | Accreditation/ Certification [4] | Uncertainty [5] |
|---|---|---|---|---|---|---|---|
| BH5 | 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 | | 1020 µg/l | | | | |
| | Cadmium, Dissolved | | <0.1 µg/l | | | | |
| | Calcium, Dissolved | | 260 mg/l | | | | |
| | Chromium, Dissolved | | <0.5 µg/l | | | | |
| | Copper, Dissolved | | 1.17 µg/l | | | | |
| | Magnesium, Dissolved | | 18 mg/l | | | | |
| | Manganese, Dissolved | | 20 µg/l | | | | |
| | Molybdenum, Dissolved | | <3 µg/l | | | | |
| | Nickel, Dissolved | | <1 µg/l | | | | |
| | Selenium Dissolved | | <1 µg/l | | | | |
| | Vanadium, Dissolved | | <2 µg/l | | | | |
| | Mercury, Dissolved | | 0 µg/l | | | | |
| | Alkalinity to pH 4.5 as CaCO3 | | 306 mg/l | | | | |
| | Conductivity at 20C | | 1380 uS/cm | | | | |
| | Potassium, Dissolved | | 1 mg/l | | | | |
| | Sodium, Dissolved | | 51 mg/l | | | | |
| | Sulphate, Dissolved as SO4 | | 395 mg/l | | | | |
| | Nitrogen : Total Oxidised as N | | 0.54 mg/l | | | | |
| | Chloride | | 71 mg/l | | | | |
| | Fluoride | | 0.07 mg/l | | | | |
| | Ammoniacal Nitrogen as N | | <0.03 mg/l | | | | |
| | Carbon, Organic : Total as C :- {TOC} | | 1 mg/l | | | | |
| | pH | | 7.05 pH Units | | | | |
| | Ionic Balance | | 1.03 % | | | | |
| | Electrical Conductivity | | 1423 µS/cm | Field Measurements | | | |
| | Temperature | | 12.3 deg C | | | | |
| | Dissolved Oxygen | | 2.89 mg/l | | | | |
| | pH | | 6.75 pH Units | | | | |
| | Groundwater Level | | 8.67 mAOD | | | | |

| Emission point | Substance/ Parameter | Emission Limit Value | Result [1] | Test Method [2] | Sample Date and Times [3] | Accreditation/ Certification [4] | Uncertainty [5] |
|---|---|---|---|---|---|---|---|
| BH6 | Aluminium, Dissolved | | <40 µg/l | | 14/02/2017 | Sampling Amec/Testing EA NLS | |
| | Antimony, Dissolved | | <10 µg/l | | | | |
| | Arsenic Dissolved | | 12 µg/l | | | | |
| | Boron, Dissolved | | 19900 µg/l | | | | |
| | Cadmium, Dissolved | | 0.29 µg/l | | | | |
| | Calcium, Dissolved | | 1070 mg/l | | | | |
| | Chromium, Dissolved | | <0.5 µg/l | | | | |
| | Copper, Dissolved | | <0.2 µg/l | | | | |
| | Magnesium, Dissolved | | 241 mg/l | | | | |
| | Manganese, Dissolved | | 1590 µg/l | | | | |
| | Molybdenum, Dissolved | | 3860 µg/l | | | | |
| | Nickel, Dissolved | | 7.6 µg/l | | | | |
| | Selenium Dissolved | | 8.82 µg/l | | | | |
| | Vanadium, Dissolved | | <200 µg/l | | | | |
| | Mercury, Dissolved | | <0.01 µg/l | | | | |
| | Alkalinity to pH 4.5 as CaCO3 | | 305 mg/l | | | | |
| | Conductivity at 20C | | 14600 uS/cm | | | | |
| | Potassium, Dissolved | | 147 mg/l | | | | |
| | Sodium, Dissolved | | 2070 mg/l | | | | |
| | Sulphate, Dissolved as SO4 | | 1760 mg/l | | | | |
| | Nitrogen : Total Oxidised as N | | 26.60 mg/l | | | | |
| | Chloride | | 4710 mg/l | | | | |
| | Fluoride | | 0.13 mg/l | | | | |
| | Ammoniacal Nitrogen as N | | 0.98 mg/l | | | | |
| | Carbon, Organic : Total as C :- {TOC} | | 2 mg/l | | | | |
| | pH | | 7.26 pH Units | | | | |
| | Ionic Balance | | 2.53 % | | | | |
| | Electrical Conductivity | | 18153 µS/cm | Field Measurements | | | |
| | Temperature | | 11.7 deg C | | | | |
| | Dissolved Oxygen | | 4.14 mg/l | | | | |
| | pH | | 7.22 pH Units | | | | |
| | Groundwater Level | | 8.10 mAOD | | | | |

| Emission point | Substance/ Parameter | Emission Limit Value | Result [1] | Test Method [2] | Sample Date and Times [3] | Accreditation/ Certification [4] | Uncertainty [5] |
|---|---|---|---|---|---|---|---|
| BH6 | Aluminium, Dissolved | | <40 µg/l | | 09/05/2017 | Sampling Amec/Testing EA NLS | |
| | Antimony, Dissolved | | <10 µg/l | | | | |
| | Arsenic Dissolved | | 29 µg/l | | | | |
| | Boron, Dissolved | | 28200 µg/l | | | | |
| | Cadmium, Dissolved | | 0.16 µg/l | | | | |
| | Calcium, Dissolved | | 641 mg/l | | | | |
| | Chromium, Dissolved | | <0.5 µg/l | | | | |
| | Copper, Dissolved | | <0.2 µg/l | | | | |
| | Magnesium, Dissolved | | 209 mg/l | | | | |
| | Manganese, Dissolved | | 2320 µg/l | | | | |
| | Molybdenum, Dissolved | | 3400 µg/l | | | | |
| | Nickel, Dissolved | | 5.7 µg/l | | | | |
| | Selenium Dissolved | | 21.10 µg/l | | | | |
| | Vanadium, Dissolved | | <20 µg/l | | | | |
| | Mercury, Dissolved | | <0.01 µg/l | | | | |
| | Alkalinity to pH 4.5 as CaCO3 | | 330 mg/l | | | | |
| | Conductivity at 20C | | 6760 uS/cm | | | | |
| | Potassium, Dissolved | | 80 mg/l | | | | |
| | Sodium, Dissolved | | 768 mg/l | | | | |
| | Sulphate, Dissolved as SO4 | | 1950 mg/l | | | | |
| | Nitrogen : Total Oxidised as N | | 13.30 mg/l | | | | |
| | Chloride | | 1380 mg/l | | | | |
| | Fluoride | | 0.15 mg/l | | | | |
| | Ammoniacal Nitrogen as N | | 0.67 mg/l | | | | |
| | Carbon, Organic : Total as C :- {TOC} | | 1 mg/l | | | | |
| | pH | | 7.30 pH Units | | | | |
| | Ionic Balance | | 0.90 % | | | | |
| | Electrical Conductivity | | 7373 µS/cm | Field Measurements | | | |
| | Temperature | | 13.0 deg C | | | | |
| | Dissolved Oxygen | | 3.21 mg/l | | | | |
| | pH | | 7.25 pH Units | | | | |
| | Groundwater Level | | 8.26 mAOD | | | | |

| Emission point | Substance/ Parameter | Emission Limit Value | Result [1] | Test Method [2] | Sample Date and Times [3] | Accreditation/ Certification [4] | Uncertainty [5] |
|---|---|---|---|---|---|---|---|
| BH7 | Aluminium, Dissolved | | <40 ug/l | | 14/02/2017 | Sampling Amec/Testing EA NLS | |
| | Antimony, Dissolved | | <10 µg/l | | | | |
| | Arsenic Dissolved | 310 | 6 µg/l | | | | |
| | Boron, Dissolved | 60000 | 21500 µg/l | | | | |
| | Cadmium, Dissolved | 15 | 0.09 µg/l | | | | |
| | Calcium, Dissolved | | 815 mg/l | | | | |
| | Chromium, Dissolved | | <0.5 µg/l | | | | |
| | Copper, Dissolved | | <0.2 µg/l | | | | |
| | Magnesium, Dissolved | | 121 mg/l | | | | |
| | Manganese, Dissolved | | 1320 µg/l | | | | |
| | Molybdenum, Dissolved | 9000 | 3760 µg/l | | | | |
| | Nickel, Dissolved | | <0.3 µg/l | | | | |
| | Selenium Dissolved | 350 | <1 µg/l | | | | |
| | Vanadium, Dissolved | | <20 µg/l | | | | |
| | Mercury, Dissolved | 20 | <0.01 µg/l | | | | |
| | Alkalinity to pH 4.5 as CaCO3 | | 300 mg/l | | | | |
| | Conductivity at 20C | | 12900 uS/cm | | | | |
| | Potassium, Dissolved | | 257 mg/l | | | | |
| | Sodium, Dissolved | | 2320 mg/l | | | | |
| | Sulphate, Dissolved as SO4 | | 1870 mg/l | | | | |
| | Nitrogen : Total Oxidised as N | | <0.2 mg/l | | | | |
| | Chloride | | 3910 mg/l | | | | |
| | Fluoride | | 0.42 mg/l | | | | |
| | Ammoniacal Nitrogen as N | 6.6 | 3.22 mg/l | | | | |
| | Carbon, Organic : Total as C :- {TOC} | | 2 mg/l | | | | |
| | pH | | 7.18 pH Units | | | | |
| | Ionic Balance | | 0.90 % | | | | |
| | Electrical Conductivity | | 15703 µS/cm | Field Measurements | | | |
| | Temperature | | 11.0 deg C | | | | |
| | Dissolved Oxygen | | 1.25 mg/l | | | | |
| | pH | | 6.69 pH Units | | | | |
| | Groundwater Level | | 2.74 mAOD | | | | |

| Emission point | Substance/ Parameter | Emission Limit Value | Result [1] | Test Method [2] | Sample Date and Times [3] | Accreditation/ Certification [4] | Uncertainty [5] |
|---|---|---|---|---|---|---|---|
| BH7 | Aluminium, Dissolved | | <40 µg/l | | 09/05/2017 | Sampling Amec/Testing EA NLS | |
| | Antimony, Dissolved | | <10 µg/l | | | | |
| | Arsenic Dissolved | 310 | 4 µg/l | | | | |
| | Boron, Dissolved | 60000 | 22400 µg/l | | | | |
| | Cadmium, Dissolved | 15 | 0.09 µg/l | | | | |
| | Calcium, Dissolved | | 785 mg/l | | | | |
| | Chromium, Dissolved | | <0.5 µg/l | | | | |
| | Copper, Dissolved | | 0.92 µg/l | | | | |
| | Magnesium, Dissolved | | 116 mg/l | | | | |
| | Manganese, Dissolved | | 1210 µg/l | | | | |
| | Molybdenum, Dissolved | 9000 | 3860 µg/l | | | | |
| | Nickel, Dissolved | | <0.3 µg/l | | | | |
| | Selenium Dissolved | 350 | <1 µg/l | | | | |
| | Vanadium, Dissolved | | <20 µg/l | | | | |
| | Mercury, Dissolved | 20 | <0.01 µg/l | | | | |
| | Alkalinity to pH 4.5 as CaCO3 | | 260 mg/l | | | | |
| | Conductivity at 20C | | 13400 uS/cm | | | | |
| | Potassium, Dissolved | | 289 mg/l | | | | |
| | Sodium, Dissolved | | 2250 mg/l | | | | |
| | Sulphate, Dissolved as SO4 | | 1850 mg/l | | | | |
| | Nitrogen : Total Oxidised as N | | <0.2 mg/l | | | | |
| | Chloride | | 4020 mg/l | | | | |
| | Fluoride | | 0.43 mg/l | | | | |
| | Ammoniacal Nitrogen as N | 6.6 | 3.08 mg/l | | | | |
| | Carbon, Organic : Total as C :- {TOC} | | <0.7 mg/l | | | | |
| | pH | | 7.14 pH Units | | | | |
| | Ionic Balance | | 1.03 % | | | | |
| | Electrical Conductivity | | 15750 µS/cm | Field Measurements | | | |
| | Temperature | | 16.0 deg C | | | | |
| | Dissolved Oxygen | | 0.70 mg/l | | | | |
| | pH | | 6.95 pH Units | | | | |
| | Groundwater Level | | 3.24 mAOD | | | | |

| Emission point | Substance/ Parameter | Emission Limit Value | Result [1] | Test Method [2] | Sample Date and Times [3] | Accreditation/ Certification [4] | Uncertainty [5] |
|---|---|---|---|---|---|---|---|
| BH8 | Aluminium, Dissolved | | <40 µg/l | | 14/02/2017 | Sampling Amec/Testing EA NLS | |
| | Antimony, Dissolved | | <10 µg/l | | | | |
| | Arsenic Dissolved | | <1 µg/l | | | | |
| | Boron, Dissolved | | 1890 µg/l | | | | |
| | Cadmium, Dissolved | | <0.03 µg/l | | | | |
| | Calcium, Dissolved | | 205 mg/l | | | | |
| | Chromium, Dissolved | | <0.5 µg/l | | | | |
| | Copper, Dissolved | | <0.2 µg/l | | | | |
| | Magnesium, Dissolved | | 373 mg/l | | | | |
| | Manganese, Dissolved | | 66 µg/l | | | | |
| | Molybdenum, Dissolved | | <30 µg/l | | | | |
| | Nickel, Dissolved | | 0.3 µg/l | | | | |
| | Selenium Dissolved | | <1 µg/l | | | | |
| | Vanadium, Dissolved | | <20 µg/l | | | | |
| | Mercury, Dissolved | | <0.01 µg/l | | | | |
| | Alkalinity to pH 4.5 as CaCO3 | | 735 mg/l | | | | |
| | Conductivity at 20C | | 18600 uS/cm | | | | |
| | Potassium, Dissolved | | 116 mg/l | | | | |
| | Sodium, Dissolved | | 3670 mg/l | | | | |
| | Sulphate, Dissolved as SO4 | | 410 mg/l | | | | |
| | Nitrogen : Total Oxidised as N | | <0.2 mg/l | | | | |
| | Chloride | | 6770 mg/l | | | | |
| | Fluoride | | 0.53 mg/l | | | | |
| | Ammoniacal Nitrogen as N | | 6.20 mg/l | | | | |
| | Carbon, Organic : Total as C :- {TOC} | | 4.1 mg/l | | | | |
| | pH | | 7.10 pH Units | | | | |
| | Ionic Balance | | 2.58 % | | | | |
| | Electrical Conductivity | | 22363 µS/cm | Field Measurements | | | |
| | Temperature | | 11.1 deg C | | | | |
| | Dissolved Oxygen | | 2.38 mg/l | | | | |
| | pH | | 7.02 pH Units | | | | |
| | Groundwater Level | | 6.44 mAOD | | | | |

| Emission point | Substance/ Parameter | Emission Limit Value | Result [1] | Test Method [2] | Sample Date and Times [3] | Accreditation/ Certification [4] | Uncertainty [5] |
|---|---|---|---|---|---|---|---|
| BH8 | Aluminium, Dissolved | | 82 µg/l | | 09/05/2017 | Sampling Amec/Testing EA NLS | |
| | Antimony, Dissolved | | 22 µg/l | | | | |
| | Arsenic Dissolved | | 92 µg/l | | | | |
| | Boron, Dissolved | | 15700 µg/l | | | | |
| | Cadmium, Dissolved | | 0.06 µg/l | | | | |
| | Calcium, Dissolved | | 512 mg/l | | | | |
| | Chromium, Dissolved | | <0.5 µg/l | | | | |
| | Copper, Dissolved | | <0.2 µg/l | | | | |
| | Magnesium, Dissolved | | 229 mg/l | | | | |
| | Manganese, Dissolved | | 922 µg/l | | | | |
| | Molybdenum, Dissolved | | 2200 µg/l | | | | |
| | Nickel, Dissolved | | 0.8 µg/l | | | | |
| | Selenium Dissolved | | 11.60 µg/l | | | | |
| | Vanadium, Dissolved | | <20 µg/l | | | | |
| | Mercury, Dissolved | | 0 µg/l | | | | |
| | Alkalinity to pH 4.5 as CaCO3 | | 290 mg/l | | | | |
| | Conductivity at 20C | | 1180 uS/cm | | | | |
| | Potassium, Dissolved | | 116 mg/l | | | | |
| | Sodium, Dissolved | | 1340 mg/l | | | | |
| | Sulphate, Dissolved as SO4 | | 1290 mg/l | | | | |
| | Nitrogen : Total Oxidised as N | | 0.75 mg/l | | | | |
| | Chloride | | 44 mg/l | | | | |
| | Fluoride | | 0.23 mg/l | | | | |
| | Ammoniacal Nitrogen as N | | 1.32 mg/l | | | | |
| | Carbon, Organic : Total as C :- {TOC} | | <0.7 mg/l | | | | |
| | pH | | 8.02 pH Units | | | | |
| | Ionic Balance | | 51.38 % | | | | |
| | Electrical Conductivity | | 1903 µS/cm | Field Measurements | | | |
| | Temperature | | 11.9 deg C | | | | |
| | Dissolved Oxygen | | 7.56 mg/l | | | | |
| | pH | | 7.99 pH Units | | | | |
| | Groundwater Level | | 7.05 mAOD | | | | |

| Emission point | Substance/ Parameter | Emission Limit Value | Result [1] | Test Method [2] | Sample Date and Times [3] | Accreditation/ Certification [4] | Uncertainty [5] |
|---|---|---|---|---|---|---|---|
| BH9 | Aluminium, Dissolved | | <10 µg/l | | 15/02/2017 | Sampling Amec/Testing EA NLS | |
| | Antimony, Dissolved | | <1 µg/l | | | | |
| | Arsenic Dissolved | | <1 µg/l | | | | |
| | Boron, Dissolved | | 126 µg/l | | | | |
| | Cadmium, Dissolved | | <0.1 µg/l | | | | |
| | Calcium, Dissolved | | 83 mg/l | | | | |
| | Chromium, Dissolved | | <0.5 µg/l | | | | |
| | Copper, Dissolved | | <1 µg/l | | | | |
| | Magnesium, Dissolved | | 21 mg/l | | | | |
| | Manganese, Dissolved | | <10 µg/l | | | | |
| | Molybdenum, Dissolved | | 0 µg/l | | | | |
| | Nickel, Dissolved | | <1 µg/l | | | | |
| | Selenium Dissolved | | <1 µg/l | | | | |
| | Vanadium, Dissolved | | <2 µg/l | | | | |
| | Mercury, Dissolved | | <0.01 µg/l | | | | |
| | Alkalinity to pH 4.5 as CaCO3 | | 263 mg/l | | | | |
| | Conductivity at 20C | | 588 uS/cm | | | | |
| | Potassium, Dissolved | | 2 mg/l | | | | |
| | Sodium, Dissolved | | 20 mg/l | | | | |
| | Sulphate, Dissolved as SO4 | | 29 mg/l | | | | |
| | Nitrogen : Total Oxidised as N | | 3 mg/l | | | | |
| | Chloride | | 31 mg/l | | | | |
| | Fluoride | | 0.16 mg/l | | | | |
| | Ammoniacal Nitrogen as N | | 0.03 mg/l | | | | |
| | Carbon, Organic : Total as C :- {TOC} | | <0.7 mg/l | | | | |
| | pH | | 7 pH Units | | | | |
| | Ionic Balance | | -1 % | | | | |
| | Electrical Conductivity | | 708 µS/cm | Field Measurements | | | |
| | Temperature | | 11 deg C | | | | |
| | Dissolved Oxygen | | 7 mg/l | | | | |
| | pH | | 6 pH Units | | | | |
| | Groundwater Level | | 5.03 mAOD | | | | |

| Emission point | Substance/ Parameter | Emission Limit Value | Result [1] | Test Method [2] | Sample Date and Times [3] | Accreditation/ Certification [4] | Uncertainty [5] |
|---|---|---|---|---|---|---|---|
| BH9 | Aluminium, Dissolved | | <10 µg/l | | 09/05/2017 | Sampling Amec/Testing EA NLS | |
| | Antimony, Dissolved | | <1 µg/l | | | | |
| | Arsenic Dissolved | | <1 µg/l | | | | |
| | Boron, Dissolved | | 103 µg/l | | | | |
| | Cadmium, Dissolved | | <0.1 µg/l | | | | |
| | Calcium, Dissolved | | 82 mg/l | | | | |
| | Chromium, Dissolved | | <0.5 µg/l | | | | |
| | Copper, Dissolved | | <1 µg/l | | | | |
| | Magnesium, Dissolved | | 20 mg/l | | | | |
| | Manganese, Dissolved | | <10 µg/l | | | | |
| | Molybdenum, Dissolved | | <3 µg/l | | | | |
| | Nickel, Dissolved | | <1 µg/l | | | | |
| | Selenium Dissolved | | <1 µg/l | | | | |
| | Vanadium, Dissolved | | <2 µg/l | | | | |
| | Mercury, Dissolved | | 0 µg/l | | | | |
| | Alkalinity to pH 4.5 as CaCO3 | | 252 mg/l | | | | |
| | Conductivity at 20C | | 592 uS/cm | | | | |
| | Potassium, Dissolved | | 1.78 mg/l | | | | |
| | Sodium, Dissolved | | 19.4 mg/l | | | | |
| | Sulphate, Dissolved as SO4 | | 27.3 mg/l | | | | |
| | Nitrogen : Total Oxidised as N | | 2.68 mg/l | | | | |
| | Chloride | | 29.8 mg/l | | | | |
| | Fluoride | | 0.17 mg/l | | | | |
| | Ammoniacal Nitrogen as N | | <0.03 mg/l | | | | |
| | Carbon, Organic : Total as C :- {TOC} | | <0.7 mg/l | | | | |
| | pH | | 7.49 pH Units | | | | |
| | Ionic Balance | | -0.02 % | | | | |
| | Electrical Conductivity | | 621 µS/cm | Field Measurements | | | |
| | Temperature | | 12.0 deg C | | | | |
| | Dissolved Oxygen | | 7.49 mg/l | | | | |
| | pH | | 7.21 pH Units | | | | |
| | Groundwater Level | | 4.31 mAOD | | | | |

| Emission point | Substance/ Parameter | Emission Limit Value | Result [1] | Test Method [2] | Sample Date and Times [3] | Accreditation/ Certification [4] | Uncertainty [5] |
|---|---|---|---|---|---|---|---|
| BH10 | Aluminium, Dissolved | | <40 µg/l | | 14/02/2017 | Sampling Amec/Testing EA NLS | |
| | Antimony, Dissolved | | 14 µg/l | | | | |
| | Arsenic Dissolved | | 35 µg/l | | | | |
| | Boron, Dissolved | | 21000 µg/l | | | | |
| | Cadmium, Dissolved | | 0.07 µg/l | | | | |
| | Calcium, Dissolved | | 420 mg/l | | | | |
| | Chromium, Dissolved | | <0.5 µg/l | | | | |
| | Copper, Dissolved | | 1.71 µg/l | | | | |
| | Magnesium, Dissolved | | 202 mg/l | | | | |
| | Manganese, Dissolved | | 98 µg/l | | | | |
| | Molybdenum, Dissolved | | 2420 µg/l | | | | |
| | Nickel, Dissolved | | 0.6 µg/l | | | | |
| | Selenium Dissolved | | <1 µg/l | | | | |
| | Vanadium, Dissolved | | 44 µg/l | | | | |
| | Mercury, Dissolved | | <0.01 µg/l | | | | |
| | Alkalinity to pH 4.5 as CaCO3 | | 810 mg/l | | | | |
| | Conductivity at 20C | | 17200 uS/cm | | | | |
| | Potassium, Dissolved | | 107 mg/l | | | | |
| | Sodium, Dissolved | | 783 mg/l | | | | |
| | Sulphate, Dissolved as SO4 | | 1650 mg/l | | | | |
| | Nitrogen : Total Oxidised as N | | <0.2 mg/l | | | | |
| | Chloride | | 5920 mg/l | | | | |
| | Fluoride | | 0.16 mg/l | | | | |
| | Ammoniacal Nitrogen as N | | 25.60 mg/l | | | | |
| | Carbon, Organic : Total as C :- {TOC} | | 5 mg/l | | | | |
| | pH | | 7.37 pH Units | | | | |
| | Ionic Balance | | 49.06 % | | | | |
| | Electrical Conductivity | | 21413 µS/cm | Field Measurements | | | |
| | Temperature | | 12.0 deg C | | | | |
| | Dissolved Oxygen | | 0.41 mg/l | | | | |
| | pH | | 7.03 pH Units | | | | |
| | Groundwater Level | | 2.07 mAOD | | | | |

| Emission point | Substance/ Parameter | Emission Limit Value | Result [1] | Test Method [2] | Sample Date and Times [3] | Accreditation/ Certification [4] | Uncertainty [5] |
|---|---|---|---|---|---|---|---|
| BH10 | Aluminium, Dissolved | | <40 µg/l | | 10/05/2017 | Sampling Amec/Testing EA NLS | |
| | Antimony, Dissolved | | <10 µg/l | | | | |
| | Arsenic Dissolved | | 23 µg/l | | | | |
| | Boron, Dissolved | | 15800 µg/l | | | | |
| | Cadmium, Dissolved | | 0.04 µg/l | | | | |
| | Calcium, Dissolved | | 517 mg/l | | | | |
| | Chromium, Dissolved | | <0.5 µg/l | | | | |
| | Copper, Dissolved | | <0.2 µg/l | | | | |
| | Magnesium, Dissolved | | 234 mg/l | | | | |
| | Manganese, Dissolved | | 921 µg/l | | | | |
| | Molybdenum, Dissolved | | 1880 µg/l | | | | |
| | Nickel, Dissolved | | <0.3 µg/l | | | | |
| | Selenium Dissolved | | <1 µg/l | | | | |
| | Vanadium, Dissolved | | <20 µg/l | | | | |
| | Mercury, Dissolved | | <0.01 µg/l | | | | |
| | Alkalinity to pH 4.5 as CaCO3 | | 695 mg/l | | | | |
| | Conductivity at 20C | | 8950 uS/cm | | | | |
| | Potassium, Dissolved | | 117 mg/l | | | | |
| | Sodium, Dissolved | | 1350 mg/l | | | | |
| | Sulphate, Dissolved as SO4 | | 1310 mg/l | | | | |
| | Nitrogen : Total Oxidised as N | | <0.2 mg/l | | | | |
| | Chloride | | 2470 mg/l | | | | |
| | Fluoride | | 0.25 mg/l | | | | |
| | Ammoniacal Nitrogen as N | | 21.80 mg/l | | | | |
| | Carbon, Organic : Total as C :- {TOC} | | 2 mg/l | | | | |
| | pH | | 7.19 pH Units | | | | |
| | Ionic Balance | | 1.90 % | | | | |
| | Electrical Conductivity | | 10190 µS/cm | Field Measurements | | | |
| | Temperature | | 15.0 deg C | | | | |
| | Dissolved Oxygen | | 1.32 mg/l | | | | |
| | pH | | 7.02 pH Units | | | | |
| | Groundwater Level | | 2.49 mAOD | | | | |

| Emission point | Substance/ Parameter | Emission Limit Value | Result [1] | Test Method [2] | Sample Date and Times [3] | Accreditation/ Certification [4] | Uncertainty [5] |
|---|---|---|---|---|---|---|---|
| BH11 | Aluminium, Dissolved | | <40 µg/l | | 14/02/2017 | Sampling Amec/Testing EA NLS | |
| | Antimony, Dissolved | | <10 µg/l | | | | |
| | Arsenic Dissolved | | 21.6 µg/l | | | | |
| | Boron, Dissolved | | <7000 µg/l | | | | |
| | Cadmium, Dissolved | | <0.03 µg/l | | | | |
| | Calcium, Dissolved | | 249 mg/l | | | | |
| | Chromium, Dissolved | | <0.5 µg/l | | | | |
| | Copper, Dissolved | | <0.2 µg/l | | | | |
| | Magnesium, Dissolved | | 98 mg/l | | | | |
| | Manganese, Dissolved | | 737 µg/l | | | | |
| | Molybdenum, Dissolved | | 310 µg/l | | | | |
| | Nickel, Dissolved | | 0.3 µg/l | | | | |
| | Selenium Dissolved | | <1 µg/l | | | | |
| | Vanadium, Dissolved | | <20 µg/l | | | | |
| | Mercury, Dissolved | | <0.01 µg/l | | | | |
| | Alkalinity to pH 4.5 as CaCO3 | | 630 mg/l | | | | |
| | Conductivity at 20C | | 2520 uS/cm | | | | |
| | Potassium, Dissolved | | 44 mg/l | | | | |
| | Sodium, Dissolved | | 251 mg/l | | | | |
| | Sulphate, Dissolved as SO4 | | 372 mg/l | | | | |
| | Nitrogen : Total Oxidised as N | | <0.2 mg/l | | | | |
| | Chloride | | 376 mg/l | | | | |
| | Fluoride | | 0.19 mg/l | | | | |
| | Ammoniacal Nitrogen as N | | 1.59 mg/l | | | | |
| | Carbon, Organic : Total as C :- {TOC} | | 1.7 mg/l | | | | |
| | pH | | 7.32 pH Units | | | | |
| | Ionic Balance | | 2.41 % | | | | |
| | Electrical Conductivity | | 2942 µS/cm | Field Measurements | | | |
| | Temperature | | 10.8 deg C | | | | |
| | Dissolved Oxygen | | 0.74 mg/l | | | | |
| | pH | | 7.21 pH Units | | | | |
| | Groundwater Level | | 4.40 mAOD | | | | |

| Emission point | Substance/ Parameter | Emission Limit Value | Result [1] | Test Method [2] | Sample Date and Times [3] | Accreditation/ Certification [4] | Uncertainty [5] |
|---|---|---|---|---|---|---|---|
| BH11 | Aluminium, Dissolved | | <40 µg/l | | 09/05/2017 | Sampling Amec/Testing EA NLS | |
| | Antimony, Dissolved | | <10 µg/l | | | | |
| | Arsenic Dissolved | | 13 µg/l | | | | |
| | Boron, Dissolved | | 9430 µg/l | | | | |
| | Cadmium, Dissolved | | <0.03 µg/l | | | | |
| | Calcium, Dissolved | | 296 mg/l | | | | |
| | Chromium, Dissolved | | <0.5 µg/l | | | | |
| | Copper, Dissolved | | 9.58 µg/l | | | | |
| | Magnesium, Dissolved | | 153 mg/l | | | | |
| | Manganese, Dissolved | | 911 µg/l | | | | |
| | Molybdenum, Dissolved | | 408 µg/l | | | | |
| | Nickel, Dissolved | | <0.3 µg/l | | | | |
| | Selenium Dissolved | | <1 µg/l | | | | |
| | Vanadium, Dissolved | | <20 µg/l | | | | |
| | Mercury, Dissolved | | <0.01 µg/l | | | | |
| | Alkalinity to pH 4.5 as CaCO3 | | 720 mg/l | | | | |
| | Conductivity at 20C | | 5870 uS/cm | | | | |
| | Potassium, Dissolved | | 89.9 mg/l | | | | |
| | Sodium, Dissolved | | 894 mg/l | | | | |
| | Sulphate, Dissolved as SO4 | | 718 mg/l | | | | |
| | Nitrogen : Total Oxidised as N | | <0.2 mg/l | | | | |
| | Chloride | | 1420 mg/l | | | | |
| | Fluoride | | 0.38 mg/l | | | | |
| | Ammoniacal Nitrogen as N | | 4.88 mg/l | | | | |
| | Carbon, Organic : Total as C :- {TOC} | | 5.1 mg/l | | | | |
| | pH | | 7.23 pH Units | | | | |
| | Ionic Balance | | 0.65 % | | | | |
| | Electrical Conductivity | | 9555 µS/cm | Field Measurements | | | |
| | Temperature | | 19.2 deg C | | | | |
| | Dissolved Oxygen | | 0.88 mg/l | | | | |
| | pH | | 7.12 pH Units | | | | |
| | Groundwater Level | | 4.03 mAOD | | | | |

[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 Sawyer Date 27/07/17

(authorised to sign as representative of the Operator)

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

**Operator : RWE Generation UK plc** **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 | | <40 µg/l | | 14/02/2017 | Sampling Station/Testing EA NLS | |
| | Antimony, Dissolved | | <10 µg/l | | | | |
| | Arsenic Dissolved | | 23.90 µg/l | | | | |
| | Boron, Dissolved | | 12100 µg/l | | | | |
| | Cadmium, Dissolved | | 0.157 µg/l | | | | |
| | Calcium, Dissolved | | 961 mg/l | | | | |
| | Chromium, Dissolved | | <0.5 µg/l | | | | |
| | Copper, Dissolved | | 1.940 µg/l | | | | |
| | Magnesium, Dissolved | | 71.0 mg/l | | | | |
| | Manganese, Dissolved | | 676.0 µg/l | | | | |
| | Molybdenum, Dissolved | | 5090 µg/l | | | | |
| | Nickel, Dissolved | | <0.3 µg/l | | | | |
| | Selenium Dissolved | | 10.30 µg/l | | | | |
| | Vanadium, Dissolved | | 26 µg/l | | | | |
| | Mercury, Dissolved | | <0.01 µg/l | | | | |
| | Alkalinity to pH 4.5 as CaCO3 | | 130 mg/l | | | | |
| | Conductivity at 20C | | 15300 µS/cm | | | | |
| | Potassium, Dissolved | | 197 mg/l | | | | |
| | Sodium, Dissolved | | 2740 mg/l | | | | |
| | Sulphate, Dissolved as SO4 | | 1490 mg/l | | | | |
| | Nitrogen : Total Oxidised as N | | 21.00 mg/l | | | | |
| | Chloride | | 5180 mg/l | | | | |
| | Fluoride | | 0.128 mg/l | | | | |
| | Ammoniacal Nitrogen as N | | 12.600 mg/l | | | | |
| | Carbon, Organic : Total as C :- {TOC} | | 2.90 mg/l | | | | |
| | pH | | 7.41 pH Units | | | | |

| 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 | | 49 µg/l | | 17/05/2017 | Sampling Station/Testing EA NLS | |
| | Antimony, Dissolved | | <10 µg/l | | | | |
| | Arsenic Dissolved | | 17.50 µg/l | | | | |
| | Boron, Dissolved | | 8820 µg/l | | | | |
| | Cadmium, Dissolved | | 0.17 µg/l | | | | |
| | Calcium, Dissolved | | 688 mg/l | | | | |
| | Chromium, Dissolved | | <0.5 µg/l | | | | |
| | Copper, Dissolved | | 6.740 µg/l | | | | |
| | Magnesium, Dissolved | | 54 mg/l | | | | |
| | Manganese, Dissolved | | 385.0 µg/l | | | | |
| | Molybdenum, Dissolved | | 3550 µg/l | | | | |
| | Nickel, Dissolved | | <0.3 µg/l | | | | |
| | Selenium Dissolved | | 10 µg/l | | | | |
| | Vanadium, Dissolved | | 30 µg/l | | | | |
| | Mercury, Dissolved | | 0.013 µg/l | | | | |
| | Alkalinity to pH 4.5 as CaCO3 | | 85.00 mg/l | | | | |
| | Conductivity at 20C | | 10700 uS/cm | | | | |
| | Potassium, Dissolved | | 152 mg/l | | | | |
| | Sodium, Dissolved | | 1990 mg/l | | | | |
| | Sulphate, Dissolved as SO4 | | 1110 mg/l | | | | |
| | Nitrogen : Total Oxidised as N | | 9.23 mg/l | | | | |
| | Chloride | | 3580 mg/l | | | | |
| | Fluoride | | 0.07 mg/l | | | | |
| | Ammoniacal Nitrogen as N | | 0.604 mg/l | | | | |
| | Carbon, Organic : Total as C :- {TOC} | | 6.70 mg/l | | | | |
| | pH | | 7.40 pH Units | | | | |

| 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 | | 86 µg/l | | 14/02/2017 | Sampling Station/Testing EA NLS | |
| | Antimony, Dissolved | | <10 µg/l | | | | |
| | Arsenic Dissolved | | 1.77 µg/l | | | | |
| | Boron, Dissolved | | 2150 µg/l | | | | |
| | Cadmium, Dissolved | | <0.03 µg/l | | | | |
| | Calcium, Dissolved | | 189 mg/l | | | | |
| | Chromium, Dissolved | | <0.5 µg/l | | | | |
| | Copper, Dissolved | | 2.320 µg/l | | | | |
| | Magnesium, Dissolved | | 16.9 mg/l | | | | |
| | Manganese, Dissolved | | 419.0 µg/l | | | | |
| | Molybdenum, Dissolved | | 333 µg/l | | | | |
| | Nickel, Dissolved | | 0.95 µg/l | | | | |
| | Selenium Dissolved | | <1 µg/l | | | | |
| | Vanadium, Dissolved | | <20 µg/l | | | | |
| | Mercury, Dissolved | | <0.01 µg/l | | | | |
| | Alkalinity to pH 4.5 as CaCO3 | | 275 mg/l | | | | |
| | Conductivity at 20C | | 1480 uS/cm | | | | |
| | Potassium, Dissolved | | 19 mg/l | | | | |
| | Sodium, Dissolved | | 143 mg/l | | | | |
| | Sulphate, Dissolved as SO4 | | 254 mg/l | | | | |
| | Nitrogen : Total Oxidised as N | | 2.97 mg/l | | | | |
| | Chloride | | 213 mg/l | | | | |
| | Fluoride | | 0.144 mg/l | | | | |
| | Ammoniacal Nitrogen as N | | 0.035 mg/l | | | | |
| | Carbon, Organic : Total as C :- {TOC} | | 1.90 mg/l | | | | |
| | pH | | 7.93 pH Units | | | | |

| 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 | | 66 µg/l | | 17/05/2017 | Sampling Station/Testing EA NLS | |
| | Antimony, Dissolved | | <10 µg/l | | | | |
| | Arsenic Dissolved | | 2.01 µg/l | | | | |
| | Boron, Dissolved | | 2710 µg/l | | | | |
| | Cadmium, Dissolved | | 0 µg/l | | | | |
| | Calcium, Dissolved | | 194 mg/l | | | | |
| | Chromium, Dissolved | | <0.5 µg/l | | | | |
| | Copper, Dissolved | | 1.300 µg/l | | | | |
| | Magnesium, Dissolved | | 18 mg/l | | | | |
| | Manganese, Dissolved | | 391.0 µg/l | | | | |
| | Molybdenum, Dissolved | | 459 µg/l | | | | |
| | Nickel, Dissolved | | 0.98 µg/l | | | | |
| | Selenium Dissolved | | <1 µg/l | | | | |
| | Vanadium, Dissolved | | <20 µg/l | | | | |
| | Mercury, Dissolved | | 0.0154 µg/l | | | | |
| | Alkalinity to pH 4.5 as CaCO3 | | 275.00 mg/l | | | | |
| | Conductivity at 20C | | 1530 uS/cm | | | | |
| | Potassium, Dissolved | | 23 mg/l | | | | |
| | Sodium, Dissolved | | 165 mg/l | | | | |
| | Sulphate, Dissolved as SO4 | | 303 mg/l | | | | |
| | Nitrogen : Total Oxidised as N | | 2.53 mg/l | | | | |
| | Chloride | | 215 mg/l | | | | |
| | Fluoride | | 0.13 mg/l | | | | |
| | Ammoniacal Nitrogen as N | | 0 mg/l | | | | |
| | Carbon, Organic : Total as C :- {TOC} | | 2.00 mg/l | | | | |
| | pH | | 8.03 pH Units | | | | |

| 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 | | 81 µg/l | | 14/02/2017 | Sampling Station/Testing EA NLS | |
| | Antimony, Dissolved | | <10 µg/l | | | | |
| | Arsenic Dissolved | | <1 µg/l | | | | |
| | Boron, Dissolved | | <700 µg/l | | | | |
| | Cadmium, Dissolved | | 0 µg/l | | | | |
| | Calcium, Dissolved | | 129 mg/l | | | | |
| | Chromium, Dissolved | | <0.5 µg/l | | | | |
| | Copper, Dissolved | | 1.240 µg/l | | | | |
| | Magnesium, Dissolved | | 26.1 mg/l | | | | |
| | Manganese, Dissolved | | 20.2 µg/l | | | | |
| | Molybdenum, Dissolved | | <30 µg/l | | | | |
| | Nickel, Dissolved | | 0.51 µg/l | | | | |
| | Selenium Dissolved | | <1 µg/l | | | | |
| | Vanadium, Dissolved | | <20 µg/l | | | | |
| | Mercury, Dissolved | | <0.01 µg/l | | | | |
| | Alkalinity to pH 4.5 as CaCO3 | | 310 mg/l | | | | |
| | Conductivity at 20C | | 1290 uS/cm | | | | |
| | Potassium, Dissolved | | 7 mg/l | | | | |
| | Sodium, Dissolved | | 135 mg/l | | | | |
| | Sulphate, Dissolved as SO4 | | 54 mg/l | | | | |
| | Nitrogen : Total Oxidised as N | | 4.03 mg/l | | | | |
| | Chloride | | 222 mg/l | | | | |
| | Fluoride | | 0.105 mg/l | | | | |
| | Ammoniacal Nitrogen as N | | 0.014 mg/l | | | | |
| | Carbon, Organic : Total as C :- {TOC} | | 1.80 mg/l | | | | |
| | pH | | 8.09 pH Units | | | | |

| 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 | | 213 µg/l | | 17/05/2017 | Sampling Station/Testing EA NLS | |
| | Antimony, Dissolved | | <10 µg/l | | | | |
| | Arsenic Dissolved | | <1 µg/l | | | | |
| | Boron, Dissolved | | <700 µg/l | | | | |
| | Cadmium, Dissolved | | 0.04 µg/l | | | | |
| | Calcium, Dissolved | | 114 mg/l | | | | |
| | Chromium, Dissolved | | 0.52 µg/l | | | | |
| | Copper, Dissolved | | 3.670 µg/l | | | | |
| | Magnesium, Dissolved | | 14.7 mg/l | | | | |
| | Manganese, Dissolved | | 30.6 µg/l | | | | |
| | Molybdenum, Dissolved | | <30 µg/l | | | | |
| | Nickel, Dissolved | | 0.96 µg/l | | | | |
| | Selenium Dissolved | | <1 µg/l | | | | |
| | Vanadium, Dissolved | | <20 µg/l | | | | |
| | Mercury, Dissolved | | 0.0132 µg/l | | | | |
| | Alkalinity to pH 4.5 as CaCO3 | | 265 mg/l | | | | |
| | Conductivity at 20C | | 707 uS/cm | | | | |
| | Potassium, Dissolved | | 4.85 mg/l | | | | |
| | Sodium, Dissolved | | 47.8 mg/l | | | | |
| | Sulphate, Dissolved as SO4 | | 33.6 mg/l | | | | |
| | Nitrogen : Total Oxidised as N | | 3.54 mg/l | | | | |
| | Chloride | | 73.0 mg/l | | | | |
| | Fluoride | | 0.093 mg/l | | | | |
| | Ammoniacal Nitrogen as N | | 0.024 mg/l | | | | |
| | Carbon, Organic : Total as C :- {TOC} | | 5.40 mg/l | | | | |
| | pH | | 8.28 pH Units | | | | |

| 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 | | <40 µg/l | | 14/02/2017 | Sampling Station/Testing EA NLS | |
| | Antimony, Dissolved | | <10 µg/l | | | | |
| | Arsenic Dissolved | | <1 µg/l | | | | |
| | Boron, Dissolved | | 2730 µg/l | | | | |
| | Cadmium, Dissolved | | <0.03 µg/l | | | | |
| | Calcium, Dissolved | | 206 mg/l | | | | |
| | Chromium, Dissolved | | <0.5 µg/l | | | | |
| | Copper, Dissolved | | 0.980 µg/l | | | | |
| | Magnesium, Dissolved | | 176.0 mg/l | | | | |
| | Manganese, Dissolved | | 102.0 µg/l | | | | |
| | Molybdenum, Dissolved | | 431 µg/l | | | | |
| | Nickel, Dissolved | | 0.36 µg/l | | | | |
| | Selenium Dissolved | | <1 µg/l | | | | |
| | Vanadium, Dissolved | | <20 µg/l | | | | |
| | Mercury, Dissolved | | <0.01 µg/l | | | | |
| | Alkalinity to pH 4.5 as CaCO3 | | 225 mg/l | | | | |
| | Conductivity at 20C | | 8940 uS/cm | | | | |
| | Potassium, Dissolved | | 83 mg/l | | | | |
| | Sodium, Dissolved | | 1600 mg/l | | | | |
| | Sulphate, Dissolved as SO4 | | 591 mg/l | | | | |
| | Nitrogen : Total Oxidised as N | | 1.62 mg/l | | | | |
| | Chloride | | 2850 mg/l | | | | |
| | Fluoride | | 0.303 mg/l | | | | |
| | Ammoniacal Nitrogen as N | | <0.0100 mg/l | | | | |
| | Carbon, Organic : Total as C :- {TOC} | | 3.40 mg/l | | | | |
| | pH | | 8.43 pH Units | | | | |

| 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 | | <40 µg/l | | 17/05/2017 | Sampling Station/Testing EA NLS | |
| | Antimony, Dissolved | | <10 µg/l | | | | |
| | Arsenic Dissolved | | 1.79 µg/l | | | | |
| | Boron, Dissolved | | 2990 µg/l | | | | |
| | Cadmium, Dissolved | | <0.03 µg/l | | | | |
| | Calcium, Dissolved | | 208 mg/l | | | | |
| | Chromium, Dissolved | | <0.5 µg/l | | | | |
| | Copper, Dissolved | | 6.480 µg/l | | | | |
| | Magnesium, Dissolved | | 201 mg/l | | | | |
| | Manganese, Dissolved | | 203.0 µg/l | | | | |
| | Molybdenum, Dissolved | | 471 µg/l | | | | |
| | Nickel, Dissolved | | 0.40 µg/l | | | | |
| | Selenium Dissolved | | <1 µg/l | | | | |
| | Vanadium, Dissolved | | <20 µg/l | | | | |
| | Mercury, Dissolved | | <0.01 µg/l | | | | |
| | Alkalinity to pH 4.5 as CaCO3 | | 215 mg/l | | | | |
| | Conductivity at 20C | | 9280 uS/cm | | | | |
| | Potassium, Dissolved | | 85 mg/l | | | | |
| | Sodium, Dissolved | | 1760 mg/l | | | | |
| | Sulphate, Dissolved as SO4 | | 650 mg/l | | | | |
| | Nitrogen : Total Oxidised as N | | 1.44 mg/l | | | | |
| | Chloride | | 3070 mg/l | | | | |
| | Fluoride | | 0.26 mg/l | | | | |
| | Ammoniacal Nitrogen as N | | 0.02 mg/l | | | | |
| | Carbon, Organic : Total as C :- {TOC} | | 4.70 mg/l | | | | |
| | pH | | 8.34 pH Units | | | | |

[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 D Jawbo Date 27/07/17 (authorised to sign as representative of the Operator)