

Operator: **AB Connectors Ltd**  
Installation: **Abercynon Inorganics**

Permit Reference Number: **BV7443IP**

Reporting of Water Usage for the year **2015**

Form Number: **WU1**

| Water Source          | Usage<br>(m <sup>3</sup> ) | Specific Usage<br>(m <sup>3</sup> /kg) |
|-----------------------|----------------------------|----------------------------------------|
| Mains water (potable) | 4392                       | 19.8                                   |
| Effluent discharge    | 2265                       | 10.2                                   |
| TOTAL WATER USAGE     |                            |                                        |
|                       |                            |                                        |
|                       |                            |                                        |

| Trends in Water Usage |                               |                                      |
|-----------------------|-------------------------------|--------------------------------------|
| Year                  | Parameter                     |                                      |
|                       | Water usage (m <sup>3</sup> ) | Effluent discharge (m <sup>3</sup> ) |
| 2005                  |                               |                                      |
| 2006                  |                               |                                      |
| 2007                  |                               |                                      |
| 2008                  |                               |                                      |
| 2009                  |                               |                                      |
| 2010                  |                               |                                      |

Operator's comments :

22215 Caesium used 2015

Signed .....  
(Authorised to sign as representative of the Operator)

Date: 1/2/16

Operator: **AB Connectors Ltd**  
 Installation: **Abercynon Inorganics**

Permit Reference Number: **BV7443IP**

**Reporting of Waste Disposal and Recovery for the year** ..... **2015** .....

**Form Number: R1**

| Waste Description         | Disposal |        | Recovery |  |
|---------------------------|----------|--------|----------|--|
|                           | Route    | Tonnes | Tonnes   |  |
| 1) Hazardous Wastes       |          |        |          |  |
| Effluent treatment sludge |          | 28.3   |          |  |
| Solvents                  |          | 0      |          |  |
| Other hazardous wastes    |          | 34.24  | 0.18     |  |
| Total hazardous waste     |          | 62.54  | 0.18     |  |
| 2) Non-Hazardous Wastes   |          |        |          |  |
| Metal waste               |          |        | 70.60    |  |
| Other non-hazardous waste |          |        |          |  |
| Total non-hazardous waste |          | 24.14  | 11.13    |  |

| Trends in Waste Disposal and Recovery |                                       |                                       |                              |
|---------------------------------------|---------------------------------------|---------------------------------------|------------------------------|
| Year                                  | Parameter                             |                                       |                              |
|                                       | Hazardous Waste for Disposal (tonnes) | Hazardous Waste for Recovery (tonnes) | Non-Hazardous Waste (tonnes) |
| 2005                                  |                                       |                                       |                              |
| 2006                                  |                                       |                                       |                              |
| 2007                                  |                                       |                                       |                              |
| 2008                                  |                                       |                                       |                              |
| 2009                                  |                                       |                                       |                              |
| 2010                                  |                                       |                                       |                              |

Operator's comments :

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 (Authorised to sign as representative of the Operator) .....

Date: ..... 1/2/16 .....

Operator: AB Connectors Ltd

Installation: Abercynon Inorganics

Reporting of Energy Usage for the year 2015

Permit Reference Number: BV7443IP

Form Number: E1

| Energy Source | Energy Usage |                      | CO <sub>2</sub> Produced (tonnes) |
|---------------|--------------|----------------------|-----------------------------------|
|               | Quantity     | Primary Energy (MWh) |                                   |
| Electricity * | MWh 2370.320 | 5688.768             | 2446.17                           |
| Natural Gas   | MWh 691.618  | 691.618              | 297.4                             |
|               |              |                      |                                   |
|               |              |                      |                                   |
| TOTAL         | 3061.938     | 7348.651             | 3159.9                            |

| Trends in Energy Usage |                            |                                   |                                                |
|------------------------|----------------------------|-----------------------------------|------------------------------------------------|
| Year                   | Parameter                  | CO <sub>2</sub> Produced (tonnes) | CO <sub>2</sub> per unit output (tonnes/tonne) |
|                        | Primary Energy usage (MWh) |                                   |                                                |
| 2011                   | 9241                       | 3972                              |                                                |
| 2012                   | 7265.5                     | 3124.5                            |                                                |
| 2013                   | 7050.7                     | 3031.8                            |                                                |
| 2014                   | 6384.64                    | 2745.4                            |                                                |
| 2015                   | 7348.651                   | 3159.9                            |                                                |
| 2016                   |                            |                                   |                                                |
| 2017                   |                            |                                   |                                                |
| 2018                   |                            |                                   |                                                |

\* Conversion factor for delivered electricity to primary energy = 2.4

Operator's comments :

Based on 0.43 tonnes CO<sub>2</sub>/MWh Primary Energy

Signed [Signature]  
(Authorised to sign as representative of the Operator)

Date 1/2/16

Operator: **AB Connectors Ltd**  
Installation: **Abercynon Inorganics**

Permit Reference Number: **BV7443IP**

Reporting of Performance Indicators for the year **2015**

Form Number: **P11**

| Quantity of cadmium processed |              | Annual Production/Treatment |                                     | Environmental Performance Indicators [EPI's] |                    |                    |                 |                     |  | kg Cd |
|-------------------------------|--------------|-----------------------------|-------------------------------------|----------------------------------------------|--------------------|--------------------|-----------------|---------------------|--|-------|
| Parameter                     | Current Year | Units                       | Trends in Environmental Performance |                                              |                    |                    |                 |                     |  |       |
|                               |              |                             | Year                                | Parameter                                    |                    |                    |                 |                     |  |       |
| Primary Energy Usage          | 7348.651     | MWh                         |                                     | Primary energy                               | Water Use          | Effluent discharge | Hazardous Waste | Non-Hazardous Waste |  |       |
|                               |              |                             |                                     | MWh/kg                                       | m <sup>3</sup> /kg | m <sup>3</sup> /kg | kg/kg           | kg/kg               |  |       |
| Water Use                     | 4392         | m <sup>3</sup>              | 2005                                |                                              |                    |                    |                 |                     |  |       |
| Effluent discharge            | 2265         | m <sup>3</sup>              | 2006                                |                                              |                    |                    |                 |                     |  |       |
| Hazardous waste               | 62540        | kg                          | 2007                                |                                              |                    |                    |                 |                     |  |       |
| Non-Hazardous waste           | 24140        | kg                          | 2008                                |                                              |                    |                    |                 |                     |  |       |
|                               |              |                             | 2009                                |                                              |                    |                    |                 |                     |  |       |
|                               |              |                             | 2010                                |                                              |                    |                    |                 |                     |  |       |

Operator's comments :

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Date: 1/2/16

Operator: AB Connectors Ltd  
Installation: Abercynon Inorganics

Permit Reference Number: BV7443IP

Reporting of Emissions to Air for the year 2015

Form Number: A1

| Emission Point | Substance or 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> |
|----------------|------------------------------------------|-----------------------|---------------------|--------------------------|------------------------------------|-------------------------------------------|--------------------------|
| A1             | Particulate matter                       | 2 mg/m <sup>3</sup>   | 0.71                | BS EN 13284-1            | 4/11/15                            | MCEERTS                                   |                          |
| A2             | Particulate matter                       | 10 mg/m <sup>3</sup>  | 1.5                 | BS EN 13284-1            | 4/11/15                            | MCEERTS                                   |                          |
| A3             | Particulate matter                       | 2 mg/m <sup>3</sup>   | 0.90                | BS EN 13284-1            | 4/11/15                            | MCEERTS                                   |                          |
| A4             | Scrubber liquor pH minimum               | 10.5                  | 11.40               | pH Meter                 | 4/11/15                            | MCEERTS                                   |                          |
| A4             | Oxides of nitrogen (as NO <sub>2</sub> ) | 1.5 mg/m <sup>3</sup> | 2.7                 | BS EN 14792              | 4/11/15                            | MCEERTS                                   |                          |
| A4             | Particulate matter                       | 2 mg/m <sup>3</sup>   | 1.3                 | BS EN 13284-1            | 4/11/15                            | MCEERTS                                   |                          |
| Installation   | Solvent consumption                      | 3000 kg/year          | 0                   |                          |                                    |                                           |                          |

Operator's comments :

- <sup>1</sup> 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.
- <sup>2</sup> 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.
- <sup>3</sup> For non-continuous measurements the date and time of the sample that produced the result is given.
- <sup>4</sup> The accreditation status of the equipment and/or the monitoring organisation, as appropriate, for the methods used for both sampling and analysis.
- <sup>5</sup> The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed  (Authorised to sign as representative of the Operator)

Date 1/2/16

Operator: **AB Connectors Ltd**

Installation: **Abercynon Inorganics**

Permit Reference Number: **BV7443IP**

Reporting of Emissions to Sewer for the period from **July 2015** to **September 2015**

Form Number: **S1**

| Emission Point | Substance or 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> |
|----------------|------------------------|----------------------|---------------------|--------------------------|------------------------------------|------------------------------------------|--------------------------|
| T13            | Cadmium                | 10 µg/l              | 10                  | AA3                      | 21-08-15                           |                                          |                          |
| T1             | Maximum pH             | 3.0                  | 2.07                | CONSTANT MONITORING      | 24-08-15                           |                                          |                          |
| T1             | Redox Potential        | 300 mV               | 154                 | CONSTANT MONITORING      | 05-08-15                           |                                          |                          |
| T2             | Minimum pH             | 10.5                 | 12.01               | CONSTANT MONITORING      | 20-08-15                           |                                          |                          |
| T2             | Redox Potential        | 300 mV               | 304                 | CONSTANT MONITORING      | 14-08-15                           |                                          |                          |
| T5             | Minimum pH             | 9                    | 9.45                | CONSTANT MONITORING      | 01-09-15                           |                                          |                          |
| T5             | Maximum pH             | 11                   | 10.24               | CONSTANT MONITORING      | 17-09-15                           |                                          |                          |
| S1             | Flow                   | -                    |                     |                          |                                    |                                          |                          |
| S1             | Cadmium                | 0.05 mg/l            | 0.01                | AA3                      | 30-09-15                           |                                          |                          |
| S1             | Cadmium                | 150 g/year           | 5.26                |                          |                                    |                                          |                          |
| S1             | Chromium (VI)          | 0.1 mg/l             | 0.089               | COLORMETRY               | 30-09-15                           |                                          |                          |
| S1             | Chromium               | 2 mg/l               | 0.50                | NITRATE REDUCTASE        | 07-07-15                           |                                          |                          |
| S1             | Copper                 | 2 mg/l               | 0.82                | AA3                      | 23-07-15                           |                                          |                          |
| S1             | Nickel                 | 2 mg/l               | 0.84                | AA3                      | 13-08-15                           |                                          |                          |
| S1             | Zinc                   | 2 mg/l               | 0.28                | AA3                      | 31-07-15                           |                                          |                          |
| S1             | Free cyanide           | 1.0 mg/l             | 0.271               | COLORMETRY               | 26-08-15                           |                                          |                          |

<sup>1</sup> The result given is the maximum value (or 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.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> The accreditation status of the equipment and/or the monitoring organisation, as appropriate, for the methods used for both sampling and analysis.

<sup>5</sup> The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed  (Authorised to sign as representative of the Operator)

Date: 11/2/16

Operator: **AB Connectors Ltd**  
 Installation: **Abercynon Inorganics**

Permit Reference Number: **BV7443IP**

Reporting of Emissions to Sewer for the period from **October 2015** to **December 2015**

Form Number: **S1**

| Emission Point | Substance or 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> |
|----------------|------------------------|----------------------|---------------------|--------------------------|------------------------------------|------------------------------------------|--------------------------|
| T13            | Cadmium                | 10 µg/l              | 10                  | A.A.S.                   | 27.11.15                           |                                          |                          |
| T1             | Maximum pH             | 3.0                  | 1.94                | CONTINUOUS MONITORING    | 28.11.15                           |                                          |                          |
| T1             | Redox Potential        | 300 mV               | 170                 | CONTINUOUS MONITORING    | 07.10.15                           |                                          |                          |
| T2             | Minimum pH             | 10.5                 | 11.82               | CONTINUOUS MONITORING    | 09.11.15                           |                                          |                          |
| T2             | Redox Potential        | 300 mV               | 316                 | CONTINUOUS MONITORING    | 03.11.15                           |                                          |                          |
| T5             | Minimum pH             | 9                    | 9.45                | CONTINUOUS MONITORING    | 05.10.15                           |                                          |                          |
| T5             | Maximum pH             | 11                   | 10.54               | CONTINUOUS MONITORING    | 14.12.15                           |                                          |                          |
| S1             | Flow                   | -                    |                     |                          |                                    |                                          |                          |
| S1             | Cadmium                | 0.05 mg/l            | 0.01                | AAS                      | 04.11.15                           |                                          |                          |
| S1             | Cadmium                | 150 g/year           | 6.95                |                          |                                    |                                          |                          |
| S1             | Chromium (VI)          | 0.1 mg/l             | 0.0911              | COLORIMETRY              | 14.10.15                           |                                          |                          |
| S1             | Chromium               | 2 mg/l               | 1.4                 | NITRIC ACID DIGEST ICP   | 23.10.15                           |                                          |                          |
| S1             | Copper                 | 2 mg/l               | 0.67                | AAS                      | 23.10.15                           |                                          |                          |
| S1             | Nickel                 | 2 mg/l               | 0.65                | AAS                      | 05.10.15                           |                                          |                          |
| S1             | Zinc                   | 2 mg/l               | 0.26                | AAS                      | 15.10.15                           |                                          |                          |
| S1             | Free cyanide           | 1.0 mg/l             | 0.53                | COLORIMETRY              | 23.10.15                           |                                          |                          |

- <sup>1</sup> The result given is the maximum value (or 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.
- <sup>2</sup> 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.
- <sup>3</sup> 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.
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