



Natural Resources Wales  
Chester Road  
Buckley  
Flintshire  
CH7 3AJ

Attention of: Siân McGregor-Andrew – Regulatory Officer, Industry Regulation Team

25<sup>th</sup> October 2018

Dear Ms McGregor-Andrew

**Re: Quarter 3 Monitoring Report for 2018 - Permit Number: EPR/BR9383ID/V009**

Please find enclosed the completed emissions reporting forms for the period from 1<sup>st</sup> July 2018 to 30<sup>th</sup> September 2018.

I trust this information is satisfactory, however, please do not hesitate to contact me should you require any further information.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Graham Jones'.

**Graham Jones**  
*Process and Energy Manager*

Permit Number: EPR/BR9383ID/V009  
 Facility: Queensferry Mineral Fibre Works

Operator: Knauf Insulation Ltd  
 Form Number: Air1a

**Reporting of emissions to air for the quarter from 1<sup>st</sup> July to 30<sup>th</sup> September 2018**

**Continuous Emissions Monitoring:**

| Emission Point | Substance / Parameter                 | Emission Limit Value | Month 1 Average of daily average values | Month 1 Maximum Daily average value | Month 2 Average of daily average values | Month 2 Maximum Daily average value | Month 3 Average of daily average values | Month 3 Maximum Daily average value |
|----------------|---------------------------------------|----------------------|---|-------------------------------------|---|-------------------------------------|---|-------------------------------------|
| A              | Particulate Matter                    | 30 mg/m3             | 1.75                                    | 4.39                                | 1.70                                    | 3.25                                | 1.33                                    | 2.78                                |
| A              | Oxides of Nitrogen (expressed as NO2) | 300 mg/m3            | 176.72                                  | 294.15                              | 137.06                                  | 177.07                              | 143.45                                  | 167.01                              |
| A              | Oxides of Sulphur (expressed as SO2)  | 1350 mg/m3           | 1486.28                                 | 3576.91                             | 1014.78                                 | 1318.65                             | 1081.20                                 | 1157.15                             |
| A              | Carbon Monoxide                       | 80 mg/m3             | 19.22                                   | 40.49                               | 16.19                                   | 53.37                               | 34.80                                   | 143.61                              |

Month 1 and Month 2: From 7<sup>th</sup> July, the SO2 results were not being corrected for oxygen (standard reference condition of 8% O2 Dry Gas for oxygen) due to an issue with the oxygen probe. This resulted in CEMs data recording SO2 values in excess of the ELV, however, these were not a breach of the ELV as the data was not being corrected accordingly. NRW were informed of this issue on 10<sup>th</sup> July 2018 by email and confirmation was provided that the plant was operating normally and corrected results prior to the issue with the oxygen probe were below the ELV. NRW were informed on 13<sup>th</sup> July, that the CEMS specialist had set up a fixed oxygen value of 8.5% and the CEMS had been running with a fixed value until the issue with the oxygen probe was rectified. NRW were informed by email on 16<sup>th</sup> August 2018, that the work in relation to the oxygen probe had been undertaken during the August shutdown and following plant start-up (after the planned shutdown), the CEMS was operating with a corrected oxygen reading.

In Month 3, the highest Maximum Daily Average for Carbon Monoxide was reported as un-authorized release on 7<sup>th</sup> September (Reference Number EP\_EX\_205). In total there were 5 days where the daily average CO2 reading was in excess of the ELV. Investigation revealed that the demand for gas at the cupola afterburner (Enetex) had exceeded supply resulting in incomplete oxidation of the cupola fume. The initial change to bring this into control was to increase coke addition to the cupola thus increasing generation of CO to supplement the gas as a fuel for the burner. Further investigation found a fault with a fan in the Enetex system that had resulted in lower heat recovery and increased gas demand. The fan was replaced during our plant shut on 3<sup>rd</sup> October.

Signed ..... 

Date.....25/10/2018

(Authorised to sign as representative of Operator)

Permit Number: EPR/BR9383ID/V009

Operator: Knauf Insulation Ltd

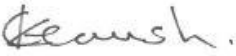
Facility: Queensferry Mineral Fibre Works

Form Number: Air1c

**Reporting of emissions to air for the 3 month period for 1<sup>st</sup> July to 30<sup>th</sup> September 2018 Point G, Cooling Zone Stack**

| Emission Point | Substance / Parameter | Emission Limit Value | Result 1 | Sample Date and Time         | Result 2 | Sample Date and Time         | Result 3 | Sample date and Time         |
|----------------|-----------------------|----------------------|----------|------------------------------|----------|------------------------------|----------|------------------------------|
| G              | Particulate Matter    | 10 mg/m <sup>3</sup> | 6.6      | 10/07/2018<br>13:55 to 14:57 | 5.8      | 10/07/2018<br>15:10 to 16:13 | 13.7     | 11/07/2018<br>08:50 to 09:52 |
| G              | Ammonia               | 10 mg/m <sup>3</sup> | 6.6      | 10/07/2018<br>13:55 to 14:57 | 6.5      | 10/07/2018<br>15:10 to 16:13 | 17.3     | 10/07/2018<br>15:10 to 16:13 |

Note: The monitoring results recorded concentrations of Particulate Matter & Ammonia (Run 3) in excess of the Emission Limit Values. This was reported as an un-authorised release on 19<sup>th</sup> September 2018 (Reference EP\_EX\_206).

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

Date.....19/09/18

Permit Number: EPR/BR9383ID/V009  
Facility: Queensferry Mineral Fibre Works

Operator: Knauf Insulation Ltd  
Form Number: Air1c

**Reporting of emissions to air for the 3 month period for 1<sup>st</sup> July to 30<sup>th</sup> September 2018 Point Y, Cold End Dust Extraction No.2**

| Emission Point | Substance / Parameter | Emission Limit Value | Result 1 | Sample Date and Time         | Result 2 | Sample Date and Time         | Result 3 | Sample date and Time         |
|----------------|-----------------------|----------------------|----------|------------------------------|----------|------------------------------|----------|------------------------------|
| Y              | Particulate Matter    | 10 mg/m <sup>3</sup> | 0.16     | 12/07/2018<br>09:25 to 10:27 | 0.15     | 12/07/2018<br>10:35 to 11:37 | 0.15     | 12/07/2018<br>11:43 to 12:45 |

Signed ..... *Keusch*  
(Authorised to sign as representative of Operator)

Date.....19/09/18