



Natural Resources Wales
Chester Road
Buckley
Flintshire
CH7 3AJ

Attention of: Siân McGregor-Andrew – Senior Officer, Industry Regulation Team NE, Buckley

25th July 2019

Dear Ms McGregor-Andrew

Re: Quarter 2 Monitoring Report for 2019 - Permit Number: EPR/BR9383ID/V010

Please find enclosed the completed emissions reporting forms for the period from 1st April 2019 to 30th June 2019.

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, Energy and Environment Manager

Permit Number: EPR/BR9383ID/V010
 Facility: Queensferry Mineral Fibre Works

Operator: Knauf Insulation Ltd
 Form Number: Air1a

Reporting of emissions to air for the quarter from 1st April to 30th June 2019

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	0.101	0.265	0.085	0.611	0.031	0.074
A	Oxides of Nitrogen (expressed as NO2)	300 mg/m3	168.45	192.05	165.63	188.65	154.94	184.52
A	Oxides of Sulphur (expressed as SO2)	1350 mg/m3	1042.05	1201.12	1106.67	1316.68	1102.88	1265.20
A	Carbon Monoxide	80 mg/m3	23.98	79.25	14.81	53.41	8.82	28.88

Note. All concentration values are in mg/N m³ @ 8% O₂ Dry Gas.

In month 1, the highest Maximum Daily Averages for Oxides of Nitrogen and Carbon Monoxide was reported as an un-authorized release on 12th April (Reference Number EP_EX_225). The exceedences were due to huge correction factors being applied when fresh air O₂ content (approaching 20.9% was being measured).

Signed 

Date..... 24/7/2019

(Authorised to sign as representative of Operator)

Permit Number: EPR/BR9383ID/V010

Operator: Knauf Insulation Ltd

Facility: Queensferry Mineral Fibre Works

Form Number: Air1h

Reporting of emissions to air for the 3 month period for 1st April to 30th June 2019 Point A, Cupola Stack After Oxidizer

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
A	Chlorides as HCl	10 mg/m ³	19.4	12/06/2019 08:59 to 09:29	2.9	12/06/2019 09:37 to 10:07	9.9	12/06/2019 10:13 to 10:43

The exceedance of the emission limit value for Chlorides from Emission Point A was reported on EP_EX_232 on receipt of the analysis report on 22nd July 2019. Lime dosing to abate the chloride content was running at the time of Q2 testing.

The average result of 10.7 mg/m³ was only just over the ELV of 10 mg/m³ and within the range of measurement uncertainty of +/- 0.81 mg/m³

Variability of results between the three runs is believed to reflect variation in lime powder flow to the gas stream (observed as variable dosing line pressure). We are looking to modify the feed system to maintain steady powder flow and prevent blockages.

Signed 

Date.....25/07/2019

(Authorised to sign as representative of Operator)

Permit Number: EPR/BR9383ID/V010

Operator: Knauf Insulation Ltd

Facility: Queensferry Mineral Fibre Works

Form Number: Air1c

Reporting of emissions to air for the 6 month period 1st January to 30th June 2019

Point C, Mainline forming stack

Emission Point	Substance / Parameter	Emission Limit Value	Result ^[1]	Sample Date and Times	Result ^[2]	Sample Date and Times	Result ^[3]	Sample Date and Times
C	Particulate Matter (*)	50 mg / m ³	54.6	12/06/2019 10:57 to 12:05	60.5	12/06/2019 12:25 to 13:33	62.7	12/06/2019 13:40 to 14:49
C	Volatile Organic Compounds as C	30 mg / m ³	4.3	12/06/2019 15:10 to 15:40	5.0	12/06/2019 15:42 to 16:12	7.3	12/06/2019 16:14 to 16:44
C	Ammonia	50 mg / m ³	13.1	12/06/2019 10:57 to 12:05	16.5	12/06/2019 12:25 to 13:33	15.8	12/06/2019 13:40 to 14:49
C	Formaldehyde	5 mg / m ³	0.45	12/06/2019 15:10 to 15:40	0.69	12/06/2019 15:45 to 16:15	1.10	12/06/2019 16:20 to 16:50
C	Phenol (**)	10 mg / m ³	12.4	12/06/2019 12:35 to 13:05	13.6	12/06/2019 13:08 to 13:38	16.9	12/06/2019 13:42 to 14:12
C	Amines	3 mg/m ³	< 2.6	12/06/2019 09:25 to 10:25	< 2.7	12/06/2019 10:28 to 11:28	< 2.6	12/06/2019 11:32 to 12:32

(*) – Particulate matter ELV breach reported in Part A Notification EP_EX_234

(**) – Phenol ELV breach reported in Part A Notification EP_EX_234

Signed



(Authorised to sign as representative of Operator)

Date.....25/7/2019

Permit Number: EPR/BR9383ID/V010

Operator: Knauf Insulation Ltd

Facility: Queensferry Mineral Fibre Works

Form Number: Air1c

Reporting of emissions to air for the 3 month period for 1st April to 30th June 2019 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 ³	11.1	13/06/2019 09:10 to 10:12	12.0	13/06/2019 10:20 to 11:22	12.0	13/06/2019 11:30 to 12:32
G	Ammonia	10 mg/m ³	14.4	13/06/2019 09:10 to 10:12	16.4	13/06/2019 10:20 to 11:22	16.8	13/06/2019 11:30 to 12:32

ELV breaches for both parameters were reported in EP_EX_233 following receipt of the test results on 22nd July 2019

Signed
(Authorised to sign as representative of Operator)

Date.....25/07/2019

Permit Number: EPR/BR9383ID/V010

Operator: Knauf Insulation Ltd

Facility: Queensferry Mineral Fibre Works

Form Number: Water1

Reporting of emissions to water (other than to sewer) for the six months from 1st January to 30th June 2019

Emission Point	pH	Suspended Solids mg/l	COD	Sample Date	Sample Time
L3	7.28	14.3	45.4	2/5/2019	09:00
L4	7.63	15.8	26.3	2/5/2019	08:30
L5	7.08	64.9	85.4	17/5/2019	10:00
L6	7.13	<2	13.7	2/5/2019	10:30

Note: L5 was found to be blocked on 2/5/2019. The drain was unblocked 7/5/2019. A sample was taken during the next rainfall on 17/5/2019. Higher suspended solids and COD in this sample are thought to be due to the rainfall flushing the drain through after unblocking the drain.

Signed
(Authorised to sign as representative of Operator)

Date.....24/7/2019