

Permit Number: EPR/BL3986ID

Installation: Aberthaw Works

Operator: Tarmac Cement & Lime Ltd

Form number: Air 1 / 31 August 2010

Reporting of Emissions to Air from Emission Point A1 for the six-month period from Jan to June 2017

Substance/ Parameter	Emission Limit Value	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Accreditation/ Certification ^[4]	Uncertainty ^[5]
Hydrogen fluoride	1 mg/m ³ over minimum 1 hour period	<0.065	BS ISO 15713	10/05/2017 08:37 09:37	UKAS & MCERTS	±0.026
Cadmium & thallium and their compounds (total)	0.05mg/m ³ over minimum 30 minute, maximum 8 hour period	0.0043	BS EN 14385	10/05/2017 14:05 15:13		0.00069
Mercury and its compounds	0.05mg/m ³ over minimum 30 minute, maximum 8 hour period	0.0037	BS EN 13211	10/05/2017 14:05 15:13		0.0005
Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)	0.5mg/m ³ over minimum 30 minute, maximum 8 hour period	0.11	BS EN 14385	10/05/2017 14:05 15:13		0.014
Dioxins/furans (I-TEQ)[6]	0.1ng/m ³ over minimum 6 hour, maximum 8 hour period	0.0014	BS EN 1948	09/05/2017 10:03 16:08		0.00036
Dioxins/furans (WHO-TEQ Humans/Mammals)[6]	No limit applies	0.0014				0.00036
Dioxins/furans (WHO-TEQ Fish)[6]		0.0014				0.00035
Dioxins/furans (WHO-TEQ Birds)[6]		0.0057				0.0014
Dioxin-like PCBs (WHO-TEQ Humans/Mammals)[6]	No limit applies	0.00019	BS EN 1948			0.00034
Dioxin-like PCBs (WHO-TEQ Fish)[6]		0.001900				0.00034
Dioxin-like PCBs (WHO-TEQ Birds)[6]		0.000013				0.0000024

Substance/ Parameter	Emission Limit Value	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Accreditation/ Certification ^[4]	Uncertainty ^[5] ±mg/m3
Poly-cyclic aromatic hydrocarbons (PAHs) Total		0.09				0.06
Anthanthrene		<0.00019				0.0001
Benzo(a)anthracene		<0.00019				0.0001
Benzo(b)fluoranthene		<0.00019				0.0001
Benzo(k)fluoranthene		<0.00019				0.0001
Benzo(b)napht(2,1-d)thiophene		<0.00019				0.0001
Benzo(c)phenanthrene		<0.00019				0.0001
Benzo(ghi)perylene		<0.00019				0.0001
Benzo(a)pyrene		<0.00019				0.0001
Cholanthrene		<0.00019				0.0001
Chrysene		<0.00019				0.0001
Cyclopenta(c,d)pyrene		<0.00019				0.0001
Dibenzo(ah)anthracene		<0.00019				0.0001
Dibenzo(ai)pyrene		<0.00019				0.0001
Fluoranthrene		0.00				0.0001
Indeno(123-cd)pyrene		<0.00019				0.0001
Naphtthalene		0.07				0.02
	No limit applies		BS ISO 11338	10/05/2017 09:55 12:02	UKAS & MCERTS	

[1] 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. 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.

[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 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 result to be reported as a range based on: All congeners less than the detection limit assumed to be zero as a minimum, and all congeners less than the detection limit assumed to be at the detection limit as a maximum

Signed: Kara Bennett

(authorised to sign as representative of Lafarge Tarmac Cement and Lime Ltd)

Date: 28/01/2018

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Permit Number: EPR/BL3986/D

Installation: Aberthaw Works

Operator: Tarmac Cement & Lime Ltd

Form number: Air 1 / 31 August 2010

Reporting of Emissions to Air from Emission Point A1 for the six-month period from Jul to Dec 2017

Substance/ Parameter	Emission Limit Value	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Accreditation/ Certification ^[4]	Uncertainty ^[5]
Hydrogen fluoride	1 mg/m3 over minimum 1 hour period	0.46	BS ISO 15713	23/11/2017 07:55 08:55	UKAS & MCERTS	±0.063
Cadmium & thallium and their compounds (total)	0.05mg/m3 over minimum 30 minute, maximum 8 hour period	0.0028	BS EN 14385	23/11/2017 12:46 13:50		0.00045
Mercury and its compounds	0.05mg/m3 over minimum 30 minute, maximum 8 hour period	0.0018	BS EN 13211	23/11/2017 12:46 13:50		0.00028
Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)	0.5mg/m3 over minimum 30 minute, maximum 8 hour period	0.33	BS EN 14385	23/11/2017 12:46 13:50		0.042
Dioxins/furans (I-TEQ)[6]	0.1ng/m3 over minimum 6 hour, maximum 8 hour period	0.00023	BS EN 1948	24/11/2017 06:30 12:36		0.00057
Dioxins/furans (WHO-TEQ Humans/Mammals)[6]	No limit applies	0.0026				0.00066
Dioxins/furans (WHO-TEQ Fish)[6]		0.0028				0.0007
Dioxins/furans (WHO-TEQ Birds)[6]		0.004				0.001
Dioxin-like PCBs (WHO-TEQ Humans/Mammals)[6]	No limit applies	0.00041	BS EN 1948			0.00073
Dioxin-like PCBs (WHO-TEQ Fish)[6]		0.000023				0.0000041
Dioxin-like PCBs (WHO-TEQ Birds)[6]		0.0015				0.00027

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Substance/ Parameter	Emission Limit Value	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Accreditation/ Certification ^[4]	Uncertainty ^[5] ±mg/m ³
Poly-cyclic aromatic hydrocarbons (PAHs) Total	No limit applies	0.79	BS ISO 11338	23/11/2017 09:15 11:20	UKAS & MCERTS	0.48
Anthracene		<0.00024				0.0001
Benzo(a)anthracene		<0.00024				0.0001
Benzo(b)fluoranthene		<0.00024				0.0001
Benzo(k)fluoranthene		<0.00024				0.0001
Benzo(b)naph(2,1-d)thiophene		<0.00024				0.0001
Benzo(c)phenanthrene		<0.00024				0.0001
Benzo(ghi)perylene		<0.00024				0.0001
Benzo(a)pyrene		<0.00024				0.0001
Cholanthrene		<0.00024				0.0001
Chrysene		<0.00024				0.0001
Cyclopenta(c,d)pyrene		<0.00024				0.0001
Dibenzo(a,h)anthracene		<0.00024				0.0001
Dibenzo(a,i)pyrene		<0.00024				0.0001
Fluoranthrene		0.00				0.0001
Indeno(123-cd)pyrene		<0.00024				0.0001
Naphthalene		0.78				0.24

[1] 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. 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.

[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 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 result to be reported as a range based on: All congeners less than the detection limit assumed to be zero as a minimum, and all congeners less than the detection limit assumed to be at the detection limit as a maximum

Signed: Kara Bennett

(authorised to sign as representative of Lafarge Tarmac Cement and Lime Ltd)

Date: 29/01/2018