

Permit Number:

BT4885IT

Operator:

UPM-Kymmene UK Ltd

Facility:

Shotton Paper Mill

Form Number: A1

Reporting of periodically monitored emissions to air for the period from 1st July 2015 to 31st December 2015

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method	Result Date and Time ^[2]	Uncertainty ^[3]
A20	Hydrogen fluoride	2 mg/m ³	Periodic over minimum 1-hour period	0.26	BS ISO 15713	11:55 – 13:55 12/11/15	12.1%
A20	Nitrous Oxide (N ₂ O)	No limit applies	Periodic over minimum 1-hour period	None Detected	FTIR	10/11/15	-
A20	Cadmium & thallium and their compounds (total)	0.05 mg/m ³	over minimum 30 minute, maximum 8 hour period	0.0028	BS EN 14385	13:43 – 15:52 10/11/15	54.3%
A20	Mercury and its compounds	0.05 mg/m ³	over minimum 30 minute, maximum 8 hour period	0.0007	BS EN 13211	13:43 – 15:52 10/11/15	25.2%
20.32A20	Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)	0.5 mg/m ³	over minimum 30 minute, maximum 8 hour period	0.25	BS EN 14385	13:43 – 15:52 10/11/15	83.6%
A20	Dioxins / Furans (I-TEQ)	0.1 ng/m ³	over minimum 6 hour period, maximum 8 hour period	0.0037 / 0.0033	BS EN 1948 Parts 1, 2 and 3	08:58 – 15:11 11/11/15	42.9%
A20	Dioxin like PCBs (WHO-TEQ Humans / Mammals) (5)	No limit applies	-	0.0004 / 0.000008	BS EN 1948 Parts 1, 2 and 3	08:58 – 15:11 11/11/15	52.3%
A20	Dioxin like PCBs (WHO-TEQ Fish)	No limit applies	-	0.0033 / 0.00002	BS EN 1948 Parts 1, 2 and 3	08:58 – 15:11 11/11/15	52.3%
A20	Dioxin like PCBs (WHO-TEQ Birds) (5)	No limit applies	-	0.0044 / 0.00388	BS EN 1948 Parts 1, 2 and 3	08:58 – 15:11 11/11/15	52.3%
A20	Dioxins / Furans (WHO – TEQ Humans / Mammals) (5)	No limit applies	-	0.0035 / 0.0022	BS EN 1948 Parts 1, 2 and 3	08:58 – 15:11 11/11/15	42.9%
A20	Dioxins / Furans (WHO – TEQ Fish)	No limit applies	-	0.0038 / 0.0033	BS EN 1948 Parts 1, 2 and 3	08:58 – 15:11 11/11/15	42.9%
A20	Dioxins / Furans (WHO – TEQ Birds)	No limit applies	-	0.0075 / 0.0071	BS EN 1948 Parts 1, 2 and 3	08:58 – 15:11 11/11/15	42.9%

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method	Result Date and Time ^[2]	Uncertainty ^[3]
A20	Poly-cyclic aromatic hydrocarbons (PAHs) Total	No limit applies	-	1.4	BS ISO 11338-1 & BS ISO 11338-2	08:48 – 15:01 12/11/15	40.5%
A20	Anthanthrene	No limit applies	-	<0.0175	BS ISO 11338-1 & BS ISO 11338-2	08:48 – 15:01 12/11/15	40.5%
A20	Benzo(a)anthracene	No limit applies	-	0.05			40.5%
A20	Benzo(b)fluoranthene	No limit applies	-	0.04			40.5%
A20	Benzo(k)fluoranthene	No limit applies	-	<0.0175			40.5%
A20	Benzo(b)naph-thiophene	No limit applies	-	<0.0175			40.5%
A20	Benzo(c)phenanthrene	No limit applies	-	<0.0175			40.5%
A20	Benzo(ghi)perylene	No limit applies	-	<0.0175			40.5%
A20	Benzo(a)pyrene	No limit applies	-	0.04			40.5%
A20	Cholanthrene	No limit applies	-	<0.0175			40.5%
A20	Chrysene	No limit applies	-	<0.0175			40.5%
A20	Cyclopenta(c,d)pyrene	No limit applies	-	<0.0175			40.5%
A20	Dibenzo(ah)anthracene	No limit applies	-	<0.0175			40.5%
A20	Dibenzo(ai)pyrene	No limit applies	-	<0.0175			40.5%
A20	Fluoranthene	No limit applies	-	0.56			40.5%
A20	Indol[1,2,3-cd]pyrene	No limit applies	-	<0.0175			40.5%
A20	Naphthalene	No limit applies	-	0.49			40.5%

[1] For dioxins and dioxin-like PCBs, the result are 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

[2] The date and time of the sample that produced the result is given.

[3] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed Date 18/11/15
(authorised to sign as representative of UPM-Kymmene UK Ltd)