

Permit Number: BT48851T
UK Ltd

Facility: Shotton Paper Mill

Reporting of other performance indicators for the period 01/07/2014 to 30/09/2014

Operator: UPM-Kymmene

Form Number: Performance 2



Parameter	Units	
BOD/ADT	0.032	Kg/ADT
Suspended Solids/ADT	0.215	Kg/ADT
Ammoniacal Nitrogen/ADT	0.002	Kg/ADT
Total Phosphorus/ADT	0.003	Kg/ADT
NOx/ADT	7.81 x 10-4	Tonnes/ADT
CO2/ADT	0.017	Tonnes/ADT
Total MRF materials accepted for sorting	56052	Tonnes
Total MRF facility throughput	58169	Tonnes
Total MRF material sent for recycling off site	43889	Tonnes
Total MRF material utilised on site for newsprint production	13993	Tonnes
Total MRF material sent off site for disposal	306	Tonnes

Operator's comments :

Signed  Date 30 October 2014 (Authorised to sign as representative of Operator)

RETURNING RETURNS N. M/L 1.5

CHECKED VS AUTHORIZATION

INITIALS DATE

☒	12/11/14
☒	12/11/14
☒	12/11/14
☒	12/11/14

OK FOR PUBLIC RELEASE

12/11/14

Permit Number : BT48851T

Facility : Shotton Paper Mill

Operator : UPM-Kymmene UK Ltd

Form Number : Residue 1

Reporting of residue quality for the period from1/7/2014 to 30/9/2014

Ash Composition (TOC/LOI)		
	LOI (%)	% Carbon (TOC) ^{w/w}
Bottom Ash	0.2	-

- At least one of LOI or TOC to be reported.

Ash Composition (Metals, Dioxins, etc.)																
	Cd mg/ kg	Ti mg/ kg	Hg mg/ kg	Pb mg/ kg	Cr mg/ kg	Cu mg/ kg	Mn mg/ kg	Ni mg/ kg	As mg/ kg	Co mg/ kg	V mg/ kg	Zn mg/ kg	DIOXIN I-TEQ ng/kg	DIOXIN		
														WHO-TEQ ng/kg		
														Humans/ mammals	Birds	Fish
Bottom Ash	0.16	<0.1	<0.1	243	107	3667	424	32	58	7.1	22	2074	0.64	0.54	0.91	0.64
APC Residues	0.51	<0.1	<0.1	182	58	446	304	52	12	6.8	15	458	0.32	0.27	0.63	0.28

Signed

Date

31 October 2014 (Authorised to sign as representative of Operator)

Permit Reference Number : BT4885IT

Operator : UPM-Kymmene UK Ltd

Facility : Shotton Paper Mill

Form Number : S1

Reporting of Emissions to Sewer for the period from 01 July 2014 to 30 September 2014

NOTE 1-
Boiler 7 was down when this reading was obtained.

Emission Point	Substance / Parameter	Emission Limit Value	Result ⁽¹⁾	Test Method	Sample Date and Times ⁽²⁾	Uncertainty ⁽³⁾
E1	Volumetric Flow	300m ³ /day 24 hour period beginning 00:01	135.43 m ³ /day	BS3680	Avg flow 5.643 m ³ /hr over 3 month period. This equates to 135.43 m ³ /day	
E1	pH	6(min) Instantaneous	7.19	BS 1647-2:1984	7.19 on 9/8/14 @ 17:09	
E1	pH	9(max) Instantaneous no pH limit in permit.	10.34	BS 1647-2:1984	10.34 on 21/7/14 @ 07:17	
E1	Total suspended solids as defined by Directive 91/271/EEC	30mg/l for 95% of all measured values of periodic or flow proportional samples taken over one year.	10	BS EN 872	See note 1 above	9.2%
E1	Total suspended solids as defined by Directive 91/271/EEC	45mg/l periodic sample ¹	33	BS EN 872	1000 on 7/7/14	9.2%
E1	Mercury and its compounds, expressed as mercury (Hg)	0.03 mg/l 24-hour flow proportional sample	0.0073	BS EN 1483	0900 on 14/8/14	5.7%

Emission Point	Substance / Parameter	Emission Limit Value	Result ⁽¹⁾	Test Method	Sample Date and Times ⁽²⁾	Uncertainty ⁽³⁾
E1	Cadmium and its compounds, expressed as cadmium (Cd)	0.05 mg/l 24-hour flow proportional sample	0.0011	BS 6068-2.89	1500 on 15/9/14	4.8%
E1	Thallium and its compounds, expressed as thallium (Tl)	0.05 mg/l 24-hour flow proportional sample	0.0010	BS 6068-2.89	1500 on 15/9/14	2.5%
E1	Arsenic and its compounds, expressed as arsenic (As)	0.15 mg/l 24-hour flow proportional sample	0.016	BS 6068-2.60	1000 on 7/7/14	4.8%
E1	Lead and its compounds, expressed as lead (Pb)	0.2 mg/l 24-hour flow proportional sample	0.008	BS 6068-2.60	1000 on 7/7/14	3.6%
E1	Chromium and its compounds, expressed as chromium (Cr)	0.5 mg/l 24-hour flow proportional sample	0.034	BS 6068-2.60	1500 on 15/9/14	5.6%
E1	Copper and its compounds, expressed as copper (Cu)	0.5 mg/l 24-hour flow proportional sample	0.016	BS 6068-2.60	1000 on 7/7/14	4.2%
E1	Nickel and its compounds, expressed as nickel (Ni)	0.5 mg/l 24-hour flow proportional sample	0.038	BS 6068-2.60	1000 on 7/7/14	3.6%
E1	Zinc and its compounds, expressed as Zinc (Zn)	1.5 mg/l 24-hour flow proportional sample	0.05	BS 6068-2.60	1500 on 15/9/14	5.9%
E1	Dioxins / Furans (I-TEQ)	0.3 ng/l – at least one measurement every six months	-	BS ISO 18703	-	-

1. The result given is the maximum value obtained during the reporting period, expressed in the same terms as the emission limit value.
2. The date and time of measurements and the percentage of the process operating time covered by the result shall be given.
3. The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed

Date

31 October 2014 (Authorised to sign as representative of Operator)

Permit Number: BT4885IT
UK Ltd

Operator: UPM-Kymmene

Facility: Shotton Paper Mill

Form Number: W1

Reporting of emissions to water (other than to sewer) for the quarter from 01/07/2014 to 30/09/2014

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
W1	BOD	25 mg/l	Weekly	8 mg/l	BS EN 1899-1 (1998)	19.09.2014 09:00	
W1	Total suspended solids	60 mg/l	Weekly. For 95% of all measured values of periodic samples taken over one month	45 mg/l	BS EN 872	17.09.2014 19:00	
W1	pH max	9	Instantaneous	7.8	BS6068-2.50	Several data points	
W1	pH min	6	Instantaneous	7.0	BS6068-2.50	Several data points	
W1	COD	-	Spot	175 mg/l		05.08.2014 07:00	
W1	Ammoniacal Nitrogen	4 mg/l	Spot	0.902 mg/l		26.08.2014 07:00	
W1	Temperature degrees Celsius	25° Celsius	Continuous	23.6 ° Celsius		09.08.2014 19:00	
W1	Total Phosphorus	-	Spot	1 mg/l	M18	15.9.14 15:00	10.6%
W1	Maximum instantaneous Flow rate	800 l/s	24 hour period beginning 00:01	708 l/s		23.07.2014	

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
W1	Maximum Daily Flow	22,000 m ³ /day	Instantaneous	15430 m ³ /day		28.07.2014	
W1	Maximum Tidal Flow	11,000 m ³ /tide	Instantaneous	9990 m ³ /tide		23.07.2014	
W1	Cd (µg/m ³)	-	Spot	100 µg/m ³	M18	08.08.2014	4.8%
W1	Hg (µg/m ³)	-	Spot	100 µg/m ³	M18	08.08.2014	5.7%
W1	Fe (mg/m ³)	-	Spot	330 mg/m ³	M18	08.08.2014	5.6%
W1	Mn (mg/m ³)	-	Spot	34 mg/m ³	M18	08.08.2014	5.7%
W1	Zn (mg/m ³)	-	Spot	11mg/m ³	M18	08.08.2014	5.9%
W1	As (mg/m ³)	-	Spot	6 mg/m ³	M18	08.08.2014	4.8%
W1	Cu (mg/m ³)	-	Spot	2 mg/m ³	M18	08.08.2014	5.6%
W1	Cr (mg/m ³)	-	Spot	11 mg/m ³	M18	08.08.2014	5.6%
W1	Ni (mg/m ³)	-	Spot	5 mg/m ³	M18	08.08.2014	3.6%
W1	Pb (mg/m ³)	-	Spot	1 mg/m ³	M18	08.08.2014	3.6%

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. Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography. 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.

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

Signed  Date 31 October 2014 (Authorised to sign as representative of Operator)