

MONITORING RETURNS 10 VALVES

DATE

7-5-13

7-5-13

7-5-13

3-6-13
JB even.

Permit Reference Number : BT48851T

Facility : Shotton Paper Mill

Operator : UPM-Kymmene UK Ltd

Form Number : S1

Reporting of Emissions to Sewer for the period from 01 January 2013 to 31 March 2013

Emission Point	Substance / Parameter	Emission Limit Value	Result (1)	Test Method	Sample Date and Time (2)	Uncertainty (3)
E1	Volumetric Flow	300m ³ /day 24 hour period beginning 00:01	132	BS3680		
E1	pH	6(min) Instantaneous	8	BS 1647-2:1984		
E1	pH	9(max) Instantaneous	13	BS 1647-2:1984		
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. ¹		BS EN 872		
E1	Total suspended solids as defined by Directive 91/271/EEC	45mg/l periodic sample ¹	79.7 mg/l	BS EN 872		10%
E1	Mercury and its compounds, expressed as mercury (Hg)	0.03 mg/l 24-hour flow proportional sample	0.4 mg/l	BS EN 1483	02/01/2013	15.5%
E1	Cadmium and its compounds, expressed as cadmium (Cd)	0.05 mg/l 24-hour flow proportional sample	<1	BS 6068-2:89	02/01/2013	3.1%
E1	Thallium and its compounds, expressed as thallium (Tl)	0.05 mg/l 24-hour flow proportional sample	<1	BS 6068-2:89	02/01/2013	6.0%
E1	Arsenic and its compounds, expressed as arsenic (As)	0.15 mg/l 24-hour flow proportional sample	17	BS 6068-2:60	02/01/2013	6.1%
E1	Lead and its compounds, expressed as lead (Pb)	0.2 mg/l 24-hour flow proportional sample	2	BS 6068-2:60	02/01/2013	6.1%
E1	Chromium and its compounds, expressed as chromium (Cr)	0.5 mg/l 24-hour flow proportional sample	9	BS 6068-2:60	02/01/2013	4.6%
E1	Copper and its compounds, expressed as copper (Cu)	0.5 mg/l 24-hour flow proportional sample	9	BS 6068-2:60	02/01/2013	6.2%

↑ All metals µg/l as in attached re-submission of S1

RECEIVED
03 MAY 2013

Emission Point	Substance / Parameter	Emission Limit Value	Result ⁽¹⁾	Test Method	Sample Date and Times ⁽²⁾	Uncertainty ⁽³⁾
E1	Nickel and its compounds, expressed as nickel (Ni)	0.5 mg/l 24-hour flow proportional sample	5	BS 6068-2.60	02/01/2013	1.2%
E1	Zinc and its compounds, expressed as Zinc (Zn)	1.5 mg/l 24-hour flow proportional sample	4	BS 6068-2.60	02/01/2013	9.6%
E1	Dioxins / Furans (I-TEQ)	0.3 ng/l – at least one measurement every six months		BS ISO 18703		25%

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 26 April 2013

(authorised to sign as representative of UPM-Kymmene UK Lt

Permit Number: BT4885IT

Facility: Shotton Paper Mill

Operator: UPM-Kymmene UK Ltd

Form Number: W1



Reporting of emissions to water (other than to sewer) for the quarter from 01/01/2013 to 31/03/2013

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
W1	Biological Oxygen Demand (measured after 5 days at 20°C) with nitrification suppressed by the addition of allylthiourea)	25 mg/l		6 mg/l	ISO 5815: 1989	28.01.13 9:00	
W1	Suspended Solids	60 mg/l	For 95% of all measured values of periodic samples taken over one month	22 mg/l	BS EN 872	23.03.13 19:00	
W1	pH max	9 pH	Instantaneous	8.00	BS6068-2.50	18.01, 06.02, 07.02, 08.02, 09.02	
W1	pH min	6 pH	Instantaneous	7.326	BS6068-2.50	19.03.13 21:17	
W1	COD	-	Spot	154 mg/l		06.02.13 07:00	
W1	Ammoniacal Nitrogen	4 mg/l	Spot	1.5 mg/l		09.03.13 07:00 10.03.13 07:00	
W1	Temperature degrees Celsius	25° Celsius (note 5)	Continuous	15.05°C		08.01.13 21:00	
W1	Total Phosphorus	-	Spot	2470 ug/l		11/02/13	
W1	Maximum instantaneous Flow rate	800 l/s	24 hour period beginning 00.01	691 l/s		03.02.13 19:00	
W1	Maximum Daily Flow	22,000 m³/day	Instantaneous	17960 m³/day		02.02.13	

Variation number EPR/BT4885IT/V010

Date of Form: 15/06/2012

W1	Maximum Tidal Flow	11,000 m ³ /tide	Instantaneous	9656 m ³	03.02.13	
W1	Cd (ug/m ³)	-		<1 ug/l	28.01.13	
W1	Hg (ug/m ³)	-		0.5 ug/l	28.01.13	
W1	Fe (mg/m ³)	-		368 ug/l	28.01.13	
W1	Mn (mg/m ³)	-		41 ug/l	28.01.13	
W1	Zn (mg/m ³)	-		21 ug/l	28.01.13	
W1	As (mg/m ³)	-		10 ug/l	28.01.13	
W1	Cu (mg/m ³)	-		2 ug/l	28.01.13	
W1	Cr (mg/m ³)	-		12 ug/l	28.01.13	
W1	Ni (mg/m ³)	-		3 ug/l	28.01.13	
W1	Pb (mg/m ³)	-		1 ug/l	28.01.13	

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.

Excluding occasions reported on form W3 where a discharge up to 28 degrees Celsius is permitted.

Signed  Date 26 April 2013
(Authorised to sign as representative of Operator)

Permit Number: BT4885IT
UK Ltd

Facility: Shotton Paper Mill

Reporting of other performance indicators for the period 01/01/2013 to 31/03/2013

Operator:

Form Number:

Performance 2

UPM-Kymmene



Parameter	Units
BOD/ADT	0.022 Kg/ADT
Suspended Solids/ADT	0.017 Kg/ADT
Ammoniacal Nitrogen/ADT	0.101 Kg/ADT
Total Phosphorus/ADT	0.009 Kg/ADT
NOx/ADT	5.95 x 10 ⁻⁴ Tonnes/ADT
CO ₂ /ADT	0.111 Tonnes/ADT
Total MRF materials accepted for sorting	45,918 Tonnes
Total MRF facility throughput	46,316 Tonnes
Total MRF material sent for recycling off site	34,690 Tonnes
Total MRF material utilised on site for newsprint production	11,253 Tonnes
Total MRF material sent off site for disposal	438 Tonnes

Operator's comments :

Signed  Date. 26 April 2013
(Authorised to sign as representative of UPM-Kymmene UK Ltd)

Operator : UPM-Kymmene UK Ltd

Form Number: Residue 1

RECEIVED
03 MAY 2013

Ash Composition (TOC/LOI)		
	LOI (%)	% Carbon (TOC) ^{w/w}
Bottom Ash	<0.5 *	*0.086

- Ash Composition (Metals, Dioxins, etc.)

Ash Composition (Metals, Dioxins, etc.)																
	Cd mg/ kg	Tl 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	Birds	Fish
Bottom Ash	<0.5	<5	0.71	51	132	891	418	87	35	9	23	2420				
APC Residues	4	<.5	2.13	658	93	434	634	47	52	45	28	1480				

Date 26 April 2013.

(authorised to sign as representative of UPM-Kymmene UK Ltd)



Permit Number: BT4885IT
UK Ltd

Operator: UPM-Kymmene

Facility: Shotton Paper Mill

Form Number: A9

Release Point: A13, A15 & A18 (when in use)

Time/Date of sampling 11 Feb 2013

Discontinuous Measurement for the 3 months 1 January 2013 to 31 March 2013

Pollutant & release point	ELV (mg/m ³)	Discontinuous Measurement Form			Fuel used during sampling period
		Measured value (mg/m ³)	Sampling method	Unit load (MW)	
NOx - A13: Boiler Stack 1	450				
NOx - A15: Boiler Stack 3	150	88.5		Low fire	Natural gas
NOx - A18: Boiler Stack 6	150	124		Low fire	Natural gas

Please note: the measured value should be quoted at the appropriate reference conditions for the type of equipment being subject to emissions monitoring – see Schedule 7.

Signed
(Authorised to sign as representative of Operator)

Date 26 April 2013

