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30 APR 2014

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: 11:57 - 12:57 11 March 2014
13:04 - 14:04 11 March 2014
10:00 - 11:00 11 March 2014

Discontinuous Measurement for the 3 months 01 Jan to 31 March 2014

Pollutant & release point	ELV (mg/m ³)	Discontinuous Measurement Form			Unit load (MW)	Fuel used during sampling period
		Measured value (mg/m ³)	Sampling method	Discontinuous value		
NOx - A13: Boiler Stack 1	450	196	SRM - BS EN 14792		30%	Gas oil
NOx - A15: Boiler Stack 3	150	93	SRM - BS EN 14792		70%	Natural gas
NOx - A18: Boiler Stack 6	150	149	SRM - BS EN 14792		80%	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 

Date 25 April 2014

(Authorised to sign as representative of Operator)

MONITORING RETURNS N. WALES

CHECKED VS AUTHORITY

TRACKING

OK FOR PUBLIC REGISTRY

INITIALS DATE

JS	6/5/14
JB	1.5.14
JS	6/5/14
JB	ED00M

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NAME: [illegible]
[illegible]
[illegible]

DATE: [illegible]

BY: [illegible]

[illegible]

Permit Number: BT4885/IT
UK Ltd

Facility: Shotton Paper Mill

Operator:

Form Number:

Performance 2

Reporting of other performance indicators for the period 01/01/2014 to 31/03/2014

Parameter	Units
BOD/ADT	0.034 Kg/ADT
Suspended Solids/ADT	0.124 Kg/ADT
Ammoniacal Nitrogen/ADT	0.001 Kg/ADT
Total Phosphorus/ADT	0.014 Kg/ADT
NOx/ADT	6.94 x 10 ⁻⁴ Tonnes/ADT
CO ₂ /ADT	0.091 Tonnes/ADT
Total MRF materials accepted for sorting	54472 Tonnes
Total MRF facility throughput	54848 Tonnes
Total MRF material sent for recycling off site	38287 Tonnes
Total MRF material utilised on site for newsprint production	13485 Tonnes
Total MRF material sent off site for disposal	3201 Tonnes

Operator's comments :
Boiler 7 shutdown from 23rd Feb to 16th March for maintenance

Signed 

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Permit Number : BT4885IT

Facility : Shotton Paper Mill

Operator : UPM-Kymmene UK Ltd

Form Number : Residue 1

Reporting of residue quality for the period from 01 Jan 2014 to 31 Mar 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	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 mammals	Birds	Fish
Bottom Ash	0.72	0.1	0.1	330.1	415.9	4089	603.4	200.4	33.4	7.6	16.8	2332	0.282	0.221	0.261	0.402
APC Residues	4.02	0.3	0.79	637.7	91.1	485.8	503.3	59.2	22.5	13.4	20.6	1280	34.8	32.57	32.97	95.52

Signed



Date 25 April 2014

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Permit Reference Number : BT4885IT

Facility : Shotton Paper Mill

Operator : UPM-Kymmene UK Ltd

Form Number : S1



Reporting of Emissions to Sewer for the period from 01 January 2014 to 31 March 2014

NOTE 1- Boiler 7 shutdown from 23rd Feb to 16th March for maintenance

NOTE 2- pH readings for period of boiler shutdown not taken into account as plant down

NOTE 3- Blockage of pH probe on boiler scrubber water system resulted in lack of caustic being added to the scrubber water hence the low pH reading.
Probe unblocked and system put back online.

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	116m ³ /day	BS3680	Avg flow 4.82m ³ /hr over 3 month periods. This equates to 116m ³ /day	
E1	pH	6(min) Instantaneous	5.4	BS 1647-2:1984	03.18 on 30/3/14 See notes 1, 2 & 3 above	
E1	pH	9(max) Instantaneous	9	BS 1647-2:1984	19:23 on 16/3/14. See notes 1 & 2 above	
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		
E1	Total suspended solids as defined by Directive 91/271/EEC	45mg/l periodic sample ¹	123	BS EN 872	05/01/14	9.2%

Emission Point	Substance / Parameter	Emission Limit Value	Result ⁽¹⁾	Test Method	Sample Date and Times ⁽²⁾	Uncertainty ⁽³⁾
E1	Mercury and its compounds, expressed as mercury (Hg)	0.03 mg/l 24-hour flow proportional sample	0.0005	BS EN 1483	13/1/14 08:40	5.7%
E1	Cadmium and its compounds, expressed as cadmium (Cd)	0.05 mg/l 24-hour flow proportional sample	0.002	BS 6068-2.89	17/2/14 9:00	4.8%
E1	Thallium and its compounds, expressed as thallium (Tl)	0.05 mg/l 24-hour flow proportional sample	0.001	BS 6068-2.89	13/1/14 08:40	2.5%
E1	Arsenic and its compounds, expressed as arsenic (As)	0.15 mg/l 24-hour flow proportional sample	0.012	BS 6068-2.60	21/3/14 10:28	4.8%
E1	Lead and its compounds, expressed as lead (Pb)	0.2 mg/l 24-hour flow proportional sample	0.001	BS 6068-2.60	13/1/14 08:40	3.6%
E1	Chromium and its compounds, expressed as chromium (Cr)	0.5 mg/l 24-hour flow proportional sample	0.055	BS 6068-2.60	17/2/14 9:00	5.6%
E1	Copper and its compounds, expressed as copper (Cu)	0.5 mg/l 24-hour flow proportional sample	0.004	BS 6068-2.60	13/1/14 08:40	4.2%
E1	Nickel and its compounds, expressed as nickel (Ni)	0.5 mg/l 24-hour flow proportional sample	0.002	BS 6068-2.60	21/3/14 10:28	3.6%
E1	Zinc and its compounds, expressed as Zinc (Zn)	1.5 mg/l 24-hour flow proportional sample	0.005	BS 6068-2.60	13/1/14 08:40	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.

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Date 25 April 2014

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Permit Number:
UK Ltd

BT4885IT

Operator:

UPM-Kymmene

Facility:

Shotton Paper Mill

Form Number:

W1

Reporting of emissions to water (other than to sewer) for the quarter from 01/01/2014 to 31/03/2014

Emission Point	Emission		Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
	Substance / Parameter	Limit Value					
W1	BOD	25 mg/l	Weekly	6	BS EN 1899-1 (1998)	26.02.14 09:00	
W1	Total suspended solids	60 mg/l	Weekly. For 95% of all measured values of periodic samples taken over one month	17	BS EN 872	22.01.14 07:00	
W1	pH max	9	Instantaneous	7.7	BS6068-2.50	18.03.14 07:00	
W1	pH min	6	Instantaneous	7.2	BS6068-2.50	08.02.14 20.02.14	
W1	COD	-	Spot	167		28.02.14 07:00	
W1	Ammoniacal Nitrogen	4 mg/l	Spot	0.972		04.03.14 07:00	
W1	Temperature degrees Celsius	25° Celsius	Continuous	15.3		31.03.14 07:00	
W1	Total Phosphorus	-	Spot	2.2		27.01.14	
W1	Maximum instantaneous Flow rate	800 l/s	24 hour period beginning 00:01	709		12.03.14	

Emission								
Emission Point	Substance / Parameter	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	15070		26.03.14		
W1	Maximum Tidal Flow	11,000 m ³ /tide	Instantaneous	7284		21.03.14		
W1	Cd (µg/m ³)	-		100				
W1	Hg (µg/m ³)	-		100				
W1	Fe (mg/m ³)	-		130.0				
W1	Mn (mg/m ³)	-		9.0				
W1	Zn (mg/m ³)	-		15.0				
W1	As (mg/m ³)	-		6.0				
W1	Cu (mg/m ³)	-		2.0				
W1	Cr (mg/m ³)	-		10.0				
W1	Ni (mg/m ³)	-		5.0				
W1	Pb (mg/m ³)	-		1.0				

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 25 April 2014

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