

Permit Number : BT4885IT

Operator : UPM-Kymmene UK Ltd

Facility : Shotton Paper Mill

Form Number : Residue 1

Reporting of residue quality for the period from .....1<sup>st</sup> April 2017.....to .....30<sup>th</sup> June 2017

| Ash Composition (TOC/LOI) |         |                               |
|---------------------------|---------|-------------------------------|
|                           | LOI (%) | % Carbon (TOC) <sup>w/w</sup> |
| Bottom Ash                | <1.0    | *                             |

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

| Ash Composition (Metals, Dioxins, etc.) |             |             |             |             |             |             |             |             |             |             |            |             |                |                   |       |       |
|-----------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|-------------|----------------|-------------------|-------|-------|
|                                         | Cd<br>mg/kg | TI<br>mg/kg | Hg<br>mg/kg | Pb<br>mg/kg | Cr<br>mg/kg | Cu<br>mg/kg | Mn<br>mg/kg | Ni<br>mg/kg | As<br>mg/kg | Co<br>mg/kg | V<br>mg/kg | Zn<br>Mg/kg | DIOXIN         | DIOXIN            |       |       |
|                                         |             |             |             |             |             |             |             |             |             |             |            |             | I-TEQ<br>ng/kg | WHO-TEQ ng/kg     |       |       |
|                                         |             |             |             |             |             |             |             |             |             |             |            |             |                | Humans<br>mammals | Birds | Fish  |
| Bottom Ash                              | 1.4         | <1          | <0.1        | 1610        | 237         | 825         | 579         | 61.7        | 39.2        | 9.6         | 32         | 2322        | 0.74           | 0.833             | 0.999 | 0.827 |
| APC<br>Residues                         | 2.6         | <1          | <0.1        | 561         | 107         | 461         | 806         | 33.8        | 54.3        | 12.5        | 30         | 980         | 17.8           | 17.4              | 45.2  | 18.5  |

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