

Permit Number : BT4885IT

Facility : Shotton Paper Mill

Operator : UPM-Kymmene UK Ltd

Form Number : Residue 1

Reporting of residue quality for the period from .....1<sup>st</sup> July 2016.....to .....30th September 2016

| Ash Composition (TOC/LOI) |         |                    |
|---------------------------|---------|--------------------|
|                           | LOI (%) | % Carbon (TOC) w/w |
| Bottom Ash                | 0.1     | *                  |

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

| Ash Composition (Metals, Dioxins, etc.) |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |                 |                          |                     |        |         |
|-----------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|-----------------|--------------------------|---------------------|--------|---------|
|                                         | Cd<br>mg/k<br>g | Ti<br>mg/k<br>g | Hg<br>mg/k<br>g | Pb<br>mg/k<br>g | Cr<br>mg/k<br>g | Cu<br>mg/k<br>g | Mn<br>mg/k<br>g | Ni<br>mg/k<br>g | As<br>mg/k<br>g | Co<br>mg/k<br>g | V<br>mg/k<br>g | Zn<br>Mg/k<br>g | DIOXIN<br>I-TEQ<br>ng/kg | DIOXIN              |        |         |
|                                         |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |                 |                          | WHO-TEQ ng/kg       |        |         |
|                                         |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |                 |                          | Human<br>s<br>mamma | Birds  | Fish    |
| Bottom<br>Ash                           | 1               | 3               | 1               | 47              | 68              | 222             | 268             | 8               | 22              | 4               | 15             | 523             | .0284                    | 0.027<br>2          | 0.1080 | 00.0187 |
| APC<br>Residues                         | .66             | <.1             | 0.07            | 300             | 102             | 305             | 346             | 67.5            | 15.9            | 7.27            | 21.1           | 412             | 21                       | 32                  | 101    | 32      |

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