

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> October.....to .....31<sup>st</sup> December.....



| Ash Composition (TOC/LOI) |         |                               |
|---------------------------|---------|-------------------------------|
|                           | LOI (%) | % Carbon (TOC) <sup>w/w</sup> |
| Bottom Ash                | *0.2    | -                             |

\*At least one of LOI or TOC to be reported.

| Ash Composition (Metals, Dioxins, etc.) |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |                 |                          |               |       |      |
|-----------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|-----------------|--------------------------|---------------|-------|------|
|                                         | Cd<br>mg/<br>kg | Ti<br>mg/<br>kg | Hg<br>mg/<br>kg | Pb<br>mg/<br>kg | Cr<br>mg/<br>kg | Cu<br>mg/<br>kg | Mn<br>mg/<br>kg | Ni<br>mg/<br>kg | As<br>mg/<br>kg | Co<br>mg/<br>kg | V<br>mg/<br>kg | Zn<br>Mg/<br>kg | DIOXIN<br>I-TEQ<br>ng/kg | DIOXIN        |       |      |
|                                         |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |                 |                          | WHO-TEQ ng/kg |       |      |
|                                         |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |                 |                          | Humans<br>/   | Birds | Fish |
| Bottom<br>Ash                           | 0.61            | 0.1             | 0.11            | 472.6           | 90.8            | 1965            | 381             | 71.6            | 35              | 6.9             | 24.7           | 1103            | 0.19                     | 0.29          | 0.28  | 0.33 |
| APC<br>Residues                         | 1.94            | 0.2             | 0.28            | 278.6           | 71.6            | 298             | 308.2           | 47              | 14.1            | 8.2             | 24.7           | 580.5           | 9.1                      | 9.6           | 22    | 9.9  |

MONITORING RETURNS N. WALLS

CHECKED V6 AUTHORITY  
TRACKING

OK FOR PUBLIC REGISTER

INITIALS DATE  
JS 26/2/14  
JB 26.2.14  
JS 26/2/14  
JB 26/2/14

*Adrian Smith*

Signed ..... Date...25/02/14..... (authorised to sign as representative of UPM-Kymmene UK Ltd)