Eco-efficiency through recovery

Pulping chemicals can be used many times over.

Many valuable chemicals, such as the sodium and sulphur compounds used in pulping, can be efficiently recovered and recycled. The black liquor formed during the cooking process contains pulping chemicals and dissolved material from the pulpwood. The organic material in this liquor is incinerated in recovery boilers. Residual chemicals are then recovered to be used again in the cooking process. Small quantities of fresh sodium hydroxide or sodium sulphate may be added to the cooking process to compensate for minor losses of chemicals.

Paper-making chemicals cannot be recovered at the production stage, since most of them are incorporated in the end product. Any small amounts of non-recoverable chemicals remaining in waste water are cleaned out at mills' waste water treatment plants.

Boosting stability and quality

In paper and board manufacturing, chemicals are needed for cooking, bleaching and improving the efficiency of production. They can also be used to stabilise processes and product quality.

The suppliers of these various chemicals are evaluated under a system known as COMPASS (Company Management Performance Assessment). The COMPASS database today includes 160 chemical suppliers and 287 manufacturing units. Almost 90% of the 73 suppliers assessed during 2002 exhibited suitable environmental management capabilities and were approved.

Continuous monitoring of chemicals

Suppliers provide key information on their products on chemical safety data sheets. At each mill site, chemical safety is the responsibility of named and trained chemical contact persons. Stora Enso utilises various databases to make the necessary safety information easily available for everyone who handles or uses chemicals. ■

Read more in the Web report