ENVIRONMENTAL FOOTPRINT COMPARISON TOOL

A tool for understanding environmental decisions related to the pulp and paper industry



EFFECTS OF RECYCLED FIBER USE ON WATER USE

Newsprint Sector

A large and growing number of grades of printing and writing paper are made primarily from mechanical pulp. These are explained in Paulapuro (2000). Roughly half of the recovered old newspapers used for papermaking, however, are used to produce newsprint. Therefore, this section focuses on the co-benefits and trade-offs related to water use and effluent flows, when recycled newsprint is used in place of virgin mechanical pulp. The information below may apply to other grades of paper made from mechanical pulp, but this should not be assumed true unless confirmed by more grade-specific information.

Many mills now have facilities for producing both virgin mechanical pulp and recycled pulp from old newspapers (ONP). Therefore, in many situations, increasing recycled content will require examination of how the increase affects the water reuse practices at specific mills.

In any event, as the published information in the table below illustrates, there is significant overlap in the range of effluent flows for virgin mechanical newsprint and recycled newsprint mills. Therefore, in general, one would not expect that increasing recycled content of newsprint would have a significant effect on water use or effluent volumes. This is confirmed by statistical analysis of NCASI site-specific data.

Table R4.

Mill Description	Effluent Flow (m³/tonne)	Reference
Mechanical pulp production plus newsprint manufacture	16 to 40 (sum of pulp and paper values)	Springer 2000 Gottsching and Pakarinen 2000
Deinked pulp production plus newsprint manufacture	20 to 45 (sum of pulp and paper values)	
Recycled newsprint mills	7 to 23	
Mechanical pulp mills using Best Available Techniques and using at least 50% mechanical pulp	12 to 20	EC BREF 2001
Recycled newsprint mill using Best Available Techniques	8 to 15	
Typical virgin newsprint mill	59	Paper Task Force 2002
Typical recycled newsprint mill	55	

References

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