

Paper Mill Residue

DESCRIPTION

Composition varies by mill, but can be as much as 50 percent solids to 50 percent water. The solids are generally 50 percent fiber and as much as 50 percent minerals. Pulp's pH is typically around 12, but mills neutralize residue before disposal. Residue can also contain recoverable titanium oxide and calcium sulfate.

CLASSIFICATION

Lignocellulosic biomass

SOURCE INDUSTRY

[Pulp & Paper industry roadmap](#)

ANNUAL VOLUME GENERATED IN WISCONSIN

1.7 million tons¹

CURRENT APPLICATIONS

Landfilled, land spread, incinerated to drive off water weight

COST

~\$20/ton (landfill tipping fees)

APPLICABLE BIOREFINING PROCESSES

[Anaerobic digestion](#), [biomass gasification](#), [combustion](#), [fermentation of lignocellulosic biomass](#), [fiber composites manufacturing](#), [thermochemical liquefaction](#), [vitrification](#)

REFERENCES

¹ Bureau of Waste Management. 2002. Beneficial Use of Industrial Byproducts: 2000 Usage Summary. Wisconsin Department of Natural Resources, Madison, WI.
www.dnr.state.wi.us/org/aw/wm/publications/beneficial/beneficialuse2000report.pdf (8 April 2004)