

Ontario Pulp and Paper Regulation

Five Reasons to Regulate Organochlorines to Zero:

1. Organochlorines cause environmental harm;
2. Non-chlorine technology exists, and is spreading quickly in commercial use;
3. Markets for chlorine free paper are expanding rapidly and are expected to become standard;
4. The technology for chlorine free pulp bleaching is affordable;
5. Regulations improve competitiveness and long term stability.

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Organochlorines cause environmental harm:

1. Of the approximately 1000 organochlorines only 250 have been identified. Of those none have been studied adequately.
2. Environment Canada's 1991 study found specific chlorinated compounds which: cause cancer, fish reproductive failure, are extremely bioaccumulative, are acutely lethal, are transformed into worse chemicals after discharge, cause liver damage, weaken fish immune systems, persist in the environment and cause birth defects.
3. USA EPA scientists recently found that dioxins do cause cancer, birth defects, immunological problems, retard development, and have no safe level of exposure.
4. The International Joint Commission on Great Lakes Water Quality recently recommended that: "The parties ... develop timetables to sunset the use of chlorine and chlorine containing compounds as industrial feedstocks."

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Non-chlorine bleaching is common:

- * Pulp and Paper International recently listed 17 Kraft pulp mills using completely chlorine free pulp technologies. The same article lists 10 more mills which are conducting mill scale trials with totally chlorine free technology.
- * These mills employ combinations of three technologies: hydrogen-peroxide, ozone, and enzymes.
- * While some mills are achieving only moderate brightness the most recently converted mills are now producing pulp of essentially the same brightness and strength as mills using chlorine.
- * The pulp from these mills is being used for top grade applications such as magazine papers.
- * Louisiana-Pacific Inc. is now producing completely chlorine free pulp in California for the U.S. market.

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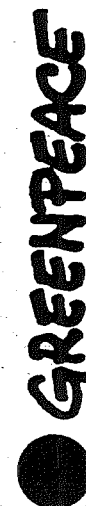
Market forces are shifting quickly to demand chlorine free paper:

- * Industry's largest trade journal Pulp and Paper International has run a series of articles entitled: "Chlorine is on the way out", "Chlorine is Dying, We Told you so", and "Totally Chlorine Free: there's no holding back the tide".

- * A wide variety of European institutions ranging from the Belgian post office to the German association of magazine producers have chlorine-free purchasing policies.

- * Here in Canada Angus Reid polls have found that 94% of Canadians would prefer unbleached to bleached consumer paper products. Also Canada's largest magazine producer MacLean-Hunter has committed to using completely chlorine free paper.

- * In the U.S. the GSA which buys \$300 million worth of paper for federal government agencies is actively seeking completely chlorine free paper. Time Magazines Inc. the world's largest publisher has publicly stated that it will use completely chlorine free paper for all of its magazines. Newsweek has invited Greenpeace to co-author its paper policy.



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Chlorine Free technology is affordable:

- * One industry spokesperson offered the estimate that to convert one mill to chlorine free technology would cost \$100 million, other informal estimates range as low as \$60 million.
- * Between 1980 and 1991 the Ontario pulp and paper industry spent approximately \$9 billion on capital upgrades.
- * At half that rate (the Kraft sector is almost half of the Ontario industry) \$100 million for 9 mills represents only two years of normal capital improvements. Going chlorine free to meet market demands is normal capital improvement.
- * A new modern pulp mill such as the proposed Alberta-Pacific mill costs \$1.2 billion to build. The whole Ontario industry could be chlorine free for less than the cost of one mill.
- * One large modern mill selling its pulp at average prices produces \$800,000 worth of pulp every day. This is \$100 million in less than 4 months
- * Using Smooth Rock Falls as an example we can see the kraft sector is expanding. That mill is completing a \$150 million expansion. From 1988-1990 it averaged a 25.5% return on investment.

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Regulation will improve competitiveness:

- * The second mill in Canada to produce chlorine free pulp was using equipment donated by a Finnish company eager to establish clients for their technology.
- * In a several studies of the environmental investments of the Canadian pulp and paper industry William Sinclair, a senior economist with Environment Canada found that the industry has systematically resisted spending on clean-up for decades, and that as a result they are now less efficient than their competitors.
- * Documents leaked from the Kimberley-Clark corporation showed that resisting a federal-provincial clean-up plan was part of a strategy to squeeze profit out of the mill by not spending the money to keep it modern. The stated goal of the plan was to take these profits, and close the mill.
- * The argument that Ontario's mills are older than the mills in British Columbia, which are already regulated is proof that we need regulation to force the industry to invest in these mills in order to keep them competitive.