

The mining and smelting industry has considerably reduced emissions to water under the ARET (Accelerated Reduction/Elimination of Toxics) program. ARET is a voluntary pollution prevention initiative that has been endorsed by 31 of 34 member companies of the Mining Association of Canada. These 31 companies account for 85 percent of the value of Canada's base metal production.

**Canadian Mining and Smelting Industry  
Voluntary Emission Reductions to Water, ARET Program**

ARET substance	Releases to water		Change from base year (%)
	Base year -1988 (tonnes)	1996 (tonnes)	
Arsenic	34.4	5.3	-85
Cadmium	13.4	1.9	-86
Copper	68.0	16.9	-75
Cyanide	103	6.1	-94
Lead	191	42	-78
Mercury	1.35	0.09	-93
Nickel	53.15	6.27	-88
Zinc	698	90	-87

Source: *The Mining Association of Canada.*

The pulp and paper industry has made significant efforts in the area of pollution abatement, resulting in a downward trend in total suspended solids and biochemical oxygen demand in mill effluent over the past several years. Between 1980 and 1997, total suspended solids (kilograms per tonne of pulp produced) dropped by 80 percent, and biochemical oxygen demand (kilograms per tonne of pulp) fell by 95 percent. Between 1988 and 1994, there was a 99.4 percent reduction in the release of dioxins and furans, reaching non-measurable levels in 1995.

Canada has plentiful supplies of good drinking water. Waterborne diseases such as typhoid fever, cholera, and dysentery are almost unknown in this country today. Water and wastewater treatment, the development and application of national drinking water guidelines, public health practices, and education have all resulted in a decrease in waterborne diseases. Except in localized cases, Canadian drinking water generally meets or exceeds international standards.

## Sustainable Water Management

A growing number of water users are competing for the available supply of water to satisfy basic needs, to enable economic development, to sustain the natural environment, and to support recreational activities. We must reconcile these diverse needs and promote the use of water in a