

While some industries purchase water directly from municipal sources, others find it more convenient, or more economical, to develop their own water-supplies by drilling wells or by employing fresh-water sources on adjacent lakes or rivers. In Canada, some 76 per cent of the water used in manufacturing is obtained by the manufacturers themselves.

Although water-uses in manufacturing are not highly consumptive, the water returned to the source is often untreated. As a result, it may contribute to pollution by the addition of undesirable process materials or waste by-products and may have a much higher temperature. This becomes a constantly-increasing problem whenever industry becomes concentrated in one locality.

### *Minerals*

The place of the mineral industry in the Canadian economy is extremely important. One out of every nine employees in Canada holds a position attributable directly to the mineral industry. Also, the industry accounts for a large part of Canada's foreign-exchange earnings.

As a rule, mineral-extraction activities in Canada are seldom far from an ample supply of water; in fact, many mines require constant pumping to prevent flooding of their underground workings.

Appendix II shows that, during 1974, 2,890 million litres (636 million gallons) of water were required each day for mineral-extraction. Crude petroleum is the most valuable product of Canada's mineral industry, and this section of the industry used some 40 per cent of the water in 1974 for deep-well injection in order to maintain sufficient pressure to force the crude oil to the surface. The water injected in such a process cannot be recirculated and is considered as consumed. Elsewhere in mining, vast quantities of water are used for processing and cooling purposes within the mining and milling operations.

### *Electric-energy generation*

Electric energy has been called the master tool of mankind. In Canada, it is the economy's mainspring — the efficient servant of life. Canadian industrial development since the turn of the century has depended on water-power as its principal source of energy and,