

production had been suspended since the end of 1982. The resumption of production was made possible as a result of gradual market recovery and the signing of long-term contracts with a number of processors abroad. The mine was the world's largest supplier of tantalum concentrate prior to its shutdown in 1982.

Cadmium. Metallic cadmium is recovered as a byproduct at electrolytic zinc plants at Trail, BC, Flin Flon, Man., Timmins, Ont. and Valleyfield, Que. and at the lead smelter in Bathurst, NB. The Bathurst operation recently announced plans to build a facility to convert cadmium bearing dust into soluble sponges. Projected cadmium production is 200 t/y and the plant was expected to be in operation before 1990.

Cadmium is used mainly for coating iron and steel products to protect them against oxidation and to give them a desirable aesthetic appearance. Other major uses are in pigments, chemicals and rechargeable batteries.

Production in all forms increased dramatically from 1484 t, valued at \$5.7 million in 1986, to an estimated 2294 t valued at \$13.1 million in 1987. Most zinc ores in Canada and zinc concentrates contain recoverable cadmium. The largest production comes from mines in Ontario, British Columbia and the Northwest Territories.

Tungsten. Canada, which normally ranks third as a world producer of tungsten, had no production in 1987. The mining operation at Tungsten, NWT was closed in 1986 due to declining prices. Canada's other tungsten producer located in New Brunswick, terminated production in 1985 after a short period of operation.

10.4 Non-metallics

Asbestos. Canada ranked second after the USSR in world asbestos production in 1987 and accounted for nearly 20% of world output. Canadian shipments of asbestos fibre were 665 300 t valued at \$235.2 million; the peak was in 1979 when shipments were 1.49 million tonnes valued at \$609 million. All Canadian production consists of chrysotile asbestos; in 1987 about 77% was from Quebec, 13% from British Columbia and 10% from Newfoundland.

Canada, the world's largest exporter of asbestos in 1987, shipped about 95% of its production to more than 70 countries. The United States and Japan, the largest markets, together accounted for 27% of Canadian exports; exports to developing countries were 42% by volume.

General weakness in markets is reversing especially due to increased demand in the Far East,

and prices are firming. Canada's total production was marketed in 1987.

With the unanimous adoption of the International Labour Organization Convention on safe use of asbestos in 1986, the health controversy seems to have been dealt with, especially with respect to chrysotile asbestos, as it emphasizes that with proper controls and regulation, chrysotile asbestos can be used safely.

Future demand for asbestos will depend mainly on the degree to which world public opinion regards asbestos as a continuing health problem, and the Canadian asbestos industry's ability to meet competition.

Clay and clay products. In 1987, shipments of clays produced from domestic sources amounted to an estimated \$210 million, compared with \$179.5 million in 1986. The increase was due mainly to higher levels of activity in Ontario.

In 1987 there was no commercial production of kaolin in Canada. Imports of kaolin in 1987 were estimated at 260 000 t valued at \$50 million. Several potential sources of kaolin are being investigated in Southern Saskatchewan and Northern Ontario. These silica sand-kaolin deposits could be mined by open-pit and produce china clay suitable for the paper and the paint industries in Ontario, Western Canada and Northwestern United States.

Potash. Canada is the world's largest exporter of potash, accounting for just over 40% of world trade. Shipments in 1987 were 7.5 million tonnes (potassium dioxide equivalent) valued at \$706 million; the industry operated at 68% of capacity. There are eight mines in Saskatchewan, with four controlled by the Saskatchewan Potash Corp., a provincial government Crown corporation which controls 40% of the provincial capacity.

In New Brunswick, the first potash mine went into production in 1983 and a second mine went into production in 1985; full capacity operations were achieved by 1988, at 1.16 million tonnes.

About 95% of world potash output of 29.0 million tonnes is used in fertilizer, the balance for industrial purposes.

Salt. Rock salt is produced at four underground mines located in Ontario, Quebec and Nova Scotia and is produced as a byproduct from two potash mines in New Brunswick and Saskatchewan. Brine is also produced in 11 plants for the manufacture of evaporated salt and chloralkalies.

Canada, the world's fifth largest producer of salt, had total shipments of 10.3 million tonnes in 1987, valued at \$235 million.