

The marketing of radioactive isotopes produced at Chalk River is handled by the Commercial Products Division of Atomic Energy of Canada Limited. This division has its headquarters in Ottawa, Ontario, where it has processing laboratories and machine shops.

In the latter are produced the Cobalt-60 Beam Therapy Units for the treatment of cancer. Two units are in production and a third will be available within a few months. The first unit to go into production is known as the "Eldorado", and a larger unit, with facilities for rotation and oscillation, is known as the "Theratron". The third unit, known as "Theratron Junior", is now in an advanced stage of design. Twenty-nine therapy units have now been installed in hospitals and other treatment centres in Canada, the United States, England, Brazil, Italy and France.

Last year the Commercial Products Division made 1,200 shipments of various products.

#### ATOMIC ENERGY CONTROL BOARD

The Atomic Energy Control Act was passed in Canada in 1946 "to make provision for the control and supervision of the development, application and use of atomic energy." Under this Act was created the Atomic Energy Control Board which has two main functions: (1) it has the power to regulate the production and application of materials relating to atomic energy, particularly fissionable materials, and (2) it has the power to make and administer security regulations required by the Canadian atomic energy program.

#### URANIUM

By the end of 1957 uranium production in Canada will be over 20 times as great as it was at the end of the Second World War. The annual gross income from that production will be approximately \$100,000,000, ranking uranium in fourth place in the gross dollar value of metal production in this country.

Until recently the Great Bear Lake region was the only important uranium producing area in Canada. Milling plants now in production and under construction will, however, make an area north of Lake Athabasca, known as the Beaverlodge region, and an area in Ontario, known as the Blind River region, the two chief uranium producing areas in Canada. These regions all lie within the Canadian Shield, a great, wide, U-shaped area of ancient rocks. Pitchblende is the principal source of uranium in the mines now producing, but the major uranium-bearing minerals of several mines planning or approaching the production stage are brannerite or uranothorite.

Eldorado Gold Mines Limited put the Port Radium mine into production in 1933 and built a refinery at Port Hope, Ontario. The first ounce of radium was produced in 1936 and in the ensuing years the mine forced a reduction in the world price. But in 1940 this private company was forced to halt its operations owing to the wartime dislocation of radium markets. In the meantime, research aimed at the development of an atomic bomb moved steadily toward success. In 1942 the company was asked to quietly