

uranium produced in Canada by others. Pursuant to this function, the company between 1953 and 1957 entered into substantial contracts with private producers in Canada for the purchase of uranium, and it has entered into contracts with buyers outside Canada for the sale of this product. Since 1958 private producers have been free to sell uranium abroad without reference to Eldorado, but subject to control measures administered through the atomic energy control board.

Historical Background

6. In order to understand the present function of Eldorado Mining and Refining Limited, it is necessary to know something of the constant changes which have taken place in the supply of uranium available in the western world since the atomic bomb was conceived in the early years of the war, and the relation of that supply to demand.

7. When the Manhattan project—which produced the bombs dropped on Japan—was initiated, there was very little uranium available in the world. The Shinkolobwe mine in the Belgian Congo and the Eldorado mine on Great Bear lake were at that time the only developed sources. Both operations depended on radium—a derivative of uranium—for most of their revenue and as the radium market had been seriously disrupted by the outbreak of hostilities, Eldorado had in mid-1940 closed the mine in the Northwest Territories. The Shinkolobwe mine, however, had continued to operate and hence filled most of the early requirements of the Manhattan project. The Canadian operation was hurriedly reopened in 1942 and for a number of reasons, of which security was not the least, the Canadian government decided that it would be in the national interest to bring the Eldorado company under complete government control. Accordingly, in 1944 the shares of the company were expropriated and a crown company was formed which took over all the assets of the previous company. Most of the uranium used during the second world war came from these two widely separated mines—one in the Belgian Congo and the other in the Canadian arctic.

8. When hostilities ceased in 1945, it was hoped that the newly-formed United Nations would be able to exercise world control of the atomic weapon. The effort failed, and in failing, triggered the atomic arms race between the eastern and western blocs which has continued with unabated intensity to the present.

9. When it became evident in late 1946 and early 1947 that world-wide control was not possible, it was at once necessary for the free world to find new and large sources of uranium and bring them into production in the shortest possible time. The only known occurrence, other than the two noted above, capable of production in quantity, was the gold ores of the South African Rand which contained from one-quarter to one pound of uranium per ton. Steps were immediately taken to develop these. The United States provided the greater part of the large sums of money required, Great Britain the rest, and construction of the treatment plants got underway in 1950-51. The first shipment of concentrate from this field was made in 1952. The contracts covered a ten-year production period and provided for the return of capital, preproduction and operating expenses plus a profit. However, a ceiling was placed on the total per pound cost that would be accepted. This field is now yielding approximately 6,200 tons of uranium oxide (U_3O_8) a year and although there is a somewhat larger potential, expansion was halted when this yearly production rate was attained.

10. Meanwhile an extensive search for deposits was initiated in nearly all parts of the free world where it was geologically possible for them to occur.