NATURAL RESOURCES

Mineral Stockpile Needs

➤ AMERICA TODAY produces only about two-thirds of the lead it uses annually, very little of the nickel it consumes, about 40% of the antimony needed and less than 8% of the non-combustible asbestos that has many strategical applications.

These figures indicate the importance of stockpiling certain essential minerals that the United States does not mine in sufficient quantities to meet war and peacetime needs, but for which it must rely on importations from foreign countries.

The data are taken from a four-volume report of the U. S. Bureau of Mines to the National Security Resources Board, now available to the public. Each of the four volumes covers one mineral.

The reports are each entitled Materials Survey, one being Lead, and the others, Nickel, Antimony and Asbestos. They can be obtained from the Superintendent of Documents, Washington, D. C., the cost being $3.50, $2.00, $1.25, and $1.75, respectively.

The volumes are world-wide surveys of the industries, describing the minerals and ores of commercial interest, the methods of mining, smelting and refining, uses and possible substitutes. Output by each producing country is included. Of particular interest are sections dealing with the producing facilities and ore reserves of various nations.

Until 1936, lead production in the United States met the country's needs. Importations began then, but did not become of real importance until 1940. Production from American mines is not much less than in the decade preceding World War II, but consumption has greatly increased.

The storage-battery and cable-covering industries are the largest users of lead. There are, however, many other important uses, lead in tetraethyl anti-knock fluids now accounting for 10% of the annual consumption.

The United States consumes 68% of the new nickel produced each year in the world, but mines very little. Fortunately, nearby Canada is a heavy producer of nickel. It mines approximately 90% of the total production outside of the Iron Curtain. Cuba also has large nickel reserves that will become available when economical methods are developed to recover the iron and chromium by-products found in its nickel ore.

America is also the world's largest user of antimony, a metal of great importance in industry, although not as well known to the public as many of the more common metals, consuming about 34% of the production outside Iron Curtain countries.

China for years was the world's greatest producer, but this source is no longer available to the United States. Antimony has many uses, particularly in alloys. One of the most important single uses is in antimonial lead for storage batteries.

The United States has developed the greatest asbestos-products industry in the world, although it imports most of the raw materials. The products are used wherever fire resistance is essential, and there is no known substitute for asbestos used in steam packings. More important is its use in automotive brake lining and clutch facings. For these purposes no substitute is known.

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