

For the fourth consecutive year, world producers' stockpiles continued to build up as a result of increased output (notably in Canada and Poland) and reduced consumption especially in the fertilizer industry which uses about 50% of the sulphur marketed. Although recovery of the fertilizer industry in particular and the world economy in general is anticipated during 1972 and 1973, increasing involuntary production of sulphur from such sources as sour natural gas and industrial pollution abatement will have an adverse effect on the restoration of equilibrium within the present decade.

**Gypsum.** Gypsum production in Canada in 1971 was 6,702,100 tons (Table 12.19). Output in general increased from the previous year, reflecting conditions in the building construction industry in Canada and the United States. Over 70% of Canada's gypsum output is exported to the United States, most of it from Nova Scotia quarries, which account for about 73% of total Canadian production of crude gypsum. The prospects are for increased production in 1972 in support of greater building activity in Canada and the US.

**Nepheline syenite.** Nepheline syenite was first produced in 1936 and, until recently when Norway started production, remained a uniquely Canadian mineral commodity. "Nepheline syenite" is a rock name that applies to a mixture of minerals, essentially the feldspars and nepheline. The presence of nepheline provides the mixture with a higher content of alumina ( $Al_2O_3$ ) than has either soda or potash feldspar and makes nepheline syenite more desirable than feldspar in certain applications, especially in the manufacture of glass, for which about 75% of the output is used. However, markets for finely ground material, used in the manufacture of whitewares such as bathroom fixtures, china, ovenware, electrical porcelain and ceramic artware, are growing rapidly. Very finely ground material is being increasingly used as a filler material in plastics, foam rubber and paints. Low-grade material is sold in bulk for use in the manufacture of fibreglass and for glazing on brick and tile.

Production originates from two mines in Canada, both located in Ontario on Blue Mountain, some 25 miles northeast of Peterborough. The deposit is pear-shaped, approximately five miles in length and up to one and a half miles in width. Reserves are very large. In 1971, production, at 517,190 tons, increased marginally from the 486,667 tons produced in 1970 and the value of production correspondingly increased to \$6,206,014 from \$5,801,228 (Table 12.20). Some 80% is exported, most of it going to the United States for use in glass manufacture. In 1971, there was a 5% increase in exports to 404,240 tons valued at \$5,229,000.

**Structural materials.** The value of all construction undertaken in Canada in 1971 was estimated to be \$15,647,000,000, and that of the production of structural materials, including cement, sand and gravel, stone, clay products and lime, was estimated at \$512,478,366. As a group, structural materials represented about 8.6% of the total value of all mineral production in 1971.

Approximately 9,067,000 tons of cement were produced in Canada in 1971, surpassing the peak output and value attained in 1966 (Table 12.21). Cement is produced in all provinces except Prince Edward Island but nearly 68% of the total 1971 production came from Ontario and Quebec. Total productive capacity of the industry in 1971 was 14,729,000 tons per year, including a new plant at Kamloops, BC. An additional plant, capable of producing up to 1,100,000 tons per year, is under construction at Bath, Ont. for Canada Cement Lafarge Ltd. The company is also expanding its facilities at St. Constant, Que., Havelock, NB and Exshaw, Alta.

Sand and gravel are used principally as aggregates in concrete for building and engineering construction and as fill in road construction. Gravel in boulder sizes is used for riprap and armour-stone construction; other over-sized material is crushed to provide various-sized ranges. Lithologically, sand and gravel deposits are usually composed of material similar to the rock types in which the deposits are found; infrequently, deposits are composed of materials that have been transported some distance from their origin. Exploitation of these low-unit-value materials is greatly influenced by the physical characteristics of the sand or gravel, by the location of the deposit with respect to suitable markets, by the specifications established to differentiate quality products and, more recently, by land use and rehabilitation regulations. (See Table 12.22.)

The stone industry includes those companies producing dimension stone, ornamental stone, crushed stone, whiting, and stone for metallurgical and chemical use. Dimension stone