## ASBESTOS IN CANADA

World production of asbestos increased by approximately 10 per cent during 1959 to supply the diversified market for this useful mineral. The increase was largely a reflection of an improvement that occurred in the sales of Canadian fibre, as consuming industries resumed near-normal purchases. The volume of Canadian shipments in 1959 was 1,042,253 tons, 21,000 tons below the record output of 1955. At \$106,591,686, value reached a new peak.

One of the chief developments of 1959 was the decision by Canadian Johns-Manville Company, Ltd., to convert the Jeffrey mine entirely to open-pit operation. In recent years, most of the ore taken from this mine has been recovered by extensive block-caving

operations underground.

Exploration of chrysotile occurrences was continued, particularly in Newfoundland and

Quebec.

Domestic consumption of asbestos remains small, almost all production being exported to world markets. In value, exports to the United States were equal to 50 per cent of all the asbestos sales made by Canadian producers. Canada imports its crocidolite and amosite from the Union of South Africa.

Chrysotile asbestos occurs in several places in northern Ontario, Quebec, Newfoundland, British Columbia and Yukon Territory, but in many cases the occurrences are not of economic grade. Consequently, production is restricted to British Columbia, Ontario and Quebec, the last contributing 95 per cent of Canada's output of asbestos fibre. Production

has been continuous since 1878.

What are believed to be the world's largest deposits of asbestos occur in the Eastern Townships of Quebec, in a narrow band extending from east of the Chaudière River southwest almost to Sherbrooke, approximately 80 miles east of Montreal. All the producing deposits in the province are in this region. The persistence of the mineral at depth, as established by drilling, indicates that reserves are sufficient for many years.

PROBLEMS OF AUTOMOBILE INDUSTRY

Although production increased in the automobile industry by more than 36 per cent, and total employment advanced by seven per cent, between 1948 and 1958, the number of employees engaged in direct production fell by more than six per cent during the same period, according to a report released recently by Mr. Michael Starr, Minister of Labour.
The report, entitled "Technological Changes

and Skilled Manpower in the Automobile and Parts Industries", describes the nature of technological change in the industries, its effects on occupations, skill levels and training, and discusses some of the human problems which arise from such change. This is

the eighth in a series of studies carried out under the Skilled Manpower Training Research Programme of the Federal Department of Labour, in co-operation with other interested federal and provincial departments, management and union organizations.

## PRODUCTION INCREASE OFFSET

A sizeable increase in productivity was noted in the automobile industry, but this expansion was accompanied by a drop in direct production labour, as a proportion of total employment, from 83 per cent in 1948 to 73

per cent in 1958.

Indirect labour increased from 17 per cent to 28 per cent during the same period. Salaried employment in the automobile industry accounted for a substantial increase in employment during the period 1948-1958. There was a fast rate of growth in manufacturing administration, owing to the increased employment of people engaged in production planning, scheduling, quality control, time study, and inspection.

## SKILL LEVEL UP

The general level of skill in these industries seems to have increased slightly as a result of greater mechanization, owing to expansion in employment in certain skilled trades and a reduction in the number of unskilled jobs. Employment of unskilled material handlers declined sharply and there is no doubt that jobs of this type were most susceptible to mechanization. By contrast, inspection increased in importance both as a matter of numbers and in the upgrading of skill requirements. Assemblers, generally speaking, were not greatly affected by changes in production techniques, for the reason that assembly operations have thus far lent themselves less readily to mechanization than have fabrication or machining operations.

In was found that the impact of technological change on workers differed from area to area and depended on a number of factors, such as the availability of alternate employment, the mobility of the displaced workers, collective agreements and general labour market

conditions

Information contained in the report is based on data obtained through field visits covering four automobile manufacturers and 18 parts supply firms, as well as a number of union locals representing the automobile workers.

## EARLIER REPORTS

In addition to the present report, studies have already been published on technological changes in the electrical and heavy-machinery industries and the household-appliance industry, and work is proceeding on a study of the impact of computers on office occupations. The programme is a continuing one and it is planned to examine technological changes in a number of other industries.

Report No. 8 is available on request from

the Department of Labour, Ottawa.