

on September 30, 1944, to 30 cents a pound, including freight. After the war the sale of other chemicals could have the effect of reducing the price still further.

The total consumption of rubber in 1944 is expected to be on the following basis: natural rubber 18%, reclaim 2.7% and synthetic rubber 55%. The use of synthetic rubber is being extended rapidly and steadily in the manufacture of essential goods for military and civilian use. Restrictions on the use of buna-s, (other than latex) were removed on August 9, 1944.

The Sarnia site was chosen for Canada's synthetic rubber plant because of the following points in its favor:

1. Sarnia is the point of intake for the Imperial Oil pipeline which conveys crude oil from the United States midcontinent fields, the safest source of crude oil coming to Canada.
2. Its proximity to the St. Clair river as a source of water made unnecessary the installation of expensive water-cooling apparatus.
3. It is conveniently close to the coke ovens at Sault Ste. Marie and Hamilton.
4. Brine, used in quantities in synthetic rubber production, is easily and cheaply obtained from the Dominion Salt Company, Sarnia.
5. The site is convenient to rail, water and road transport.
6. The plant is not far from Kitchener, Hamilton and Toronto, where many of the principal rubber processing factories are located.
7. The site is level, with a clay soil. No rock had to be blasted, no quagmires filled in and no buildings removed.

The Polymer plant is noted for its complexity, for which it has no equal anywhere in the world. It produces its own end-ingredients for the manufacture of buna-s and butyl; namely, styrene, butadiene and isobutylene, as well as its own steam and electric power. The yearly output of Polymer, about 34,000 long tons of buna-s and 4,000 long tons of butyl, together with small importations of neoprene from the United States, natural rubber from Ceylon, Africa, South and Central America and large amounts of scrap, is sufficient to provide for Canada's war-time requirements.

Really the equivalent of a more or less self-contained village, the plant covers an area of 185 acres, containing, 10 factories, each as complex as a good-size munitions plant; its own hospital, fire hall, general store, bowling alley, post office, cafeteria, ball park, dining hall, police department, administration buildings, laboratory, warehouse, machine shop, river dock and railway siding. About 1,600 men and 235 women are employed at the plant.

For its annual output of 38,000 long tons of synthetic rubber, Polymer requires approximately 400,000 tons of coal, over 35,000,000,000 imperial gallons of water, 19,000,000 imperial gallons of light ends petroleum, 2,500,000,000 cubic feet of petroleum gas, 2,250,000 imperial gallons of benzol, and enough brine to contain 18,000,000 pounds of salt, in addition to huge quantities of acids, soaps and other raw materials.

The various units of the Polymer plant are operated on a management-fee basis by the St. Clair Processing Company, Dow Chemical Company of Canada, Limited, and Canadian Synthetic Rubber Limited, under supervision of the Polymer Corporation. The management fee paid by Polymer amounts to about one-half cent per pound of synthetic rubber produced.