

## ALBRIGHT & WILSON – PORTISHEAD

In January 1953 it was announced in the local newspapers that Albright and Wilson, the Birmingham chemical company, would be erecting a £5M plant on 21 acres of land on the Portishead docks. This plant would extract molten phosphorous from imported phosphate rock. It would be necessary to build the factory on approximately 3,000 steel piles driven 60/70 feet into the ground.

The plant would be highly automated and consequently would only employ about 200 people - the weekly wages bill estimated at £1,000.

This site had been chosen for two main reasons, having a dock which could accommodate very large bulk carriers and the direct supply of electricity from Portishead Power Station. The factory would require 40,000 kW of power at 33,000 volts which would be supplied by a cable 1.5 miles long running under the lock. When in full production, Albright and Wilson, Portishead became the second highest user of electricity in the SWEB region and with this status certain responsibilities accrued. The tariff negotiated with SWEB for the supply of electricity included an agreement to drastically reduce power demand within half an hour when requested by SWEB, at times in the winter when it was expected domestic demands on the grid would be exceptionally high. Failure to comply with SWEB's request would result in very high financial penalties indeed.

Phosphorous was made at Portishead until December 1968, when, for economic reasons, production was transferred to St. Johns, Newfoundland. This new plant had been built to take advantage of the deep water facility to handle even bigger bulk carriers of raw materials which would sail a shorter distance from the country where the rock was mined. Also the Newfoundland government were offering a very low price for electricity for a fixed term of 25 years, which would be supplied from their new hydro-electric power plant.

This phosphorous made in St. Johns was transported by sea in specially constructed bulk carriers, Albright Explorer and Albright Pioneer, each of 7,000 tons. The phosphorous received at Portishead was pumped into tanks and stored until transferred to road tankers and delivered to parts of Britain where required.

The uses of phosphorous and the chemicals derived from it are many and varied. These chemicals play a vital part in our daily lives, in industry and in agriculture.