

Chemical waste is threat to Irish Sea wildlife

By Jeremy Bugler

ATTEMPTS to prevent toxic industrial chemicals from being dumped in the Irish Sea and other waters off these islands are not succeeding. Quantities of the chemicals—polychlorinated biphenyls (PCBs)—are present in sewage sludge dumped daily in the Thames Estuary, in the Irish Sea off Liverpool, and in the Firth of Clyde.

In Britain the Royal Commission on environmental Pollution in its recent first report rated as a "high priority" an inquiry into the disposal of waste at sea.

PCB's were implicated in a massive slaughter of sea birds in the Irish Sea area 18 months ago, and wildlife organisations are seriously concerned at the failure of control methods. "We're very unhappy about it," says Mr. Peter Conder, director of the Royal Society for the Protection of Birds. "We hoped this wasn't going to be a problem that would drag on and on."

PCB's, like DDT and dieldrin, accumulate in creatures. Although they may enter the marine environment in small quantities, their long-term effect is incalculable.

They are known to be present in industrial effluents sent to sewage works for treatment. During this process the chemicals mix with the organic semi-solid waste—the sludge.

Sewage sludge

The PCB's in sewage sludge dumped by Glasgow Corporation are perturbing the Clyde River Purification Board. "If PCB's are still in the sludge in six months' time, you may take it that I shall be making representations at Government level," says its director, Mr. Ian Waddington.

Samples of the sludge taken by the Board show that PCB residues are present at an average concentration of 0.5 parts

from Shieldhall in the city itself—40 miles to a point six miles south of the tale of Bute. In one year more than a million tons of sludge will be dumped here. "We've nowhere else to put it," says Mr. John Armour, city engineer in charge of the disposal.

With variations, this practice has been going on for about 70 years. The water is more than 600 ft. deep at the dumping

grounds, but strong currents disperse the sludge widely.

Many of the seabirds found dead in the major mortality in September, 1969, were washed up on the shores of the Firth of Clyde and showed high levels of PCB residues.

Tests of sludge dumped by Manchester Corporation in the Irish Sea indicate that about the same quantity of PCB's is being released there.

per million—a significant level, Monsanto Chemicals, the only manufacturer of PCB's in Britain, has withdrawn the chemicals—brand name Aroclor 1248—from certain industrial uses where they cannot be controlled and has warned its customers of the danger of letting them escape in effluent. It says it is willing to ban the chemicals altogether, if they cannot be prevented from entering the environment. But several other companies on the Continent supply the chemicals to Britain.

The sources of the escape have not been traced. Glasgow Corporation says the chemicals are used by many companies in many processes and not all the sludge dumped by the corporation originates in the city. An attempt to trace the sources through the sewers has not been successful.

The sludge is carried daily in two ships—one from Dalnair to the west of Glasgow, the other