

POISON WASTE DISCOVERY SETS DoE A BIG PROBLEM

By Tony Morse

THE nearest thing to an industrial Watergate was beginning to hit one of the big names in Britain's waste disposal business on Tuesday—World Environment Day.

The row against the Redland Group was boiling up as Eldon Griffiths of the Environment Department was opening Enpocon, the pollution control and water treatment exhibition in London.

It was sparked off by a *Sunday Times* Insight investigation into the seeping out of polychlorinated biphenyls dumped in a quarry overlooking the mining valley of Taff Vale.

The investigation showed that seepage of PCB made by Monsanto at Newport and dumped in the hillside quarry of Maendy in 1966-70 rightly alarmed local farmers—concentrations in land around the site were as high as 14 ppm or seven million times the United States safety figure. Side effects on humans include stillborn children, loss of hair, and vomiting.

Dangers

But in Britain there is no officially recognised danger level although manufacturing companies are well aware of the dangers and confine use

of PCB to areas like closed circuit heat exchanger systems. The Environment Protection Bill planned for the next session of Parliament must go much further than the basic Deposit of Poisonous Waste Act 1972 in defining pollution levels and codifying disposal methods.

The present situation allows the Department of the Environment to say that toxicological surveys show the area to be safe while analysis by ICI of farmers' samples indicates the opposite. But the DoE is sufficiently worried to make a further survey, and admits there are some 40 such tips causing concern.

The company operating the Maendy tip—Purle Waste Disposal (South Wales), part of the Redland Group—is a victim of the rapid reversal in attitudes to dumping in the past three years. In 1970 the use of landfill methods was widely accepted as the most economic way to get rid of dangerous chemicals, and we are now seeing the tragic results of short-sighted or indiscriminate use of this technique.

Purle, which inherited the problem when it bought the company previously operating the Maendy tip, did not realise until too late that cracks in the underlying rock structure allowed chemicals to seep down into the water table.

The trouble is that now use of deep mines with safe geologically sealed structures like Brownhills in Staffordshire—see *The Engineer* of November 23 1972—can be unnecessarily limited by local authorities under pressure from residents.

It is now clearly accepted that the only really safe way to dispose of PCB is incineration. Developments by Redland and other companies preventing the chemicals from attacking the incinerator refractory lining are making this method more economic.

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